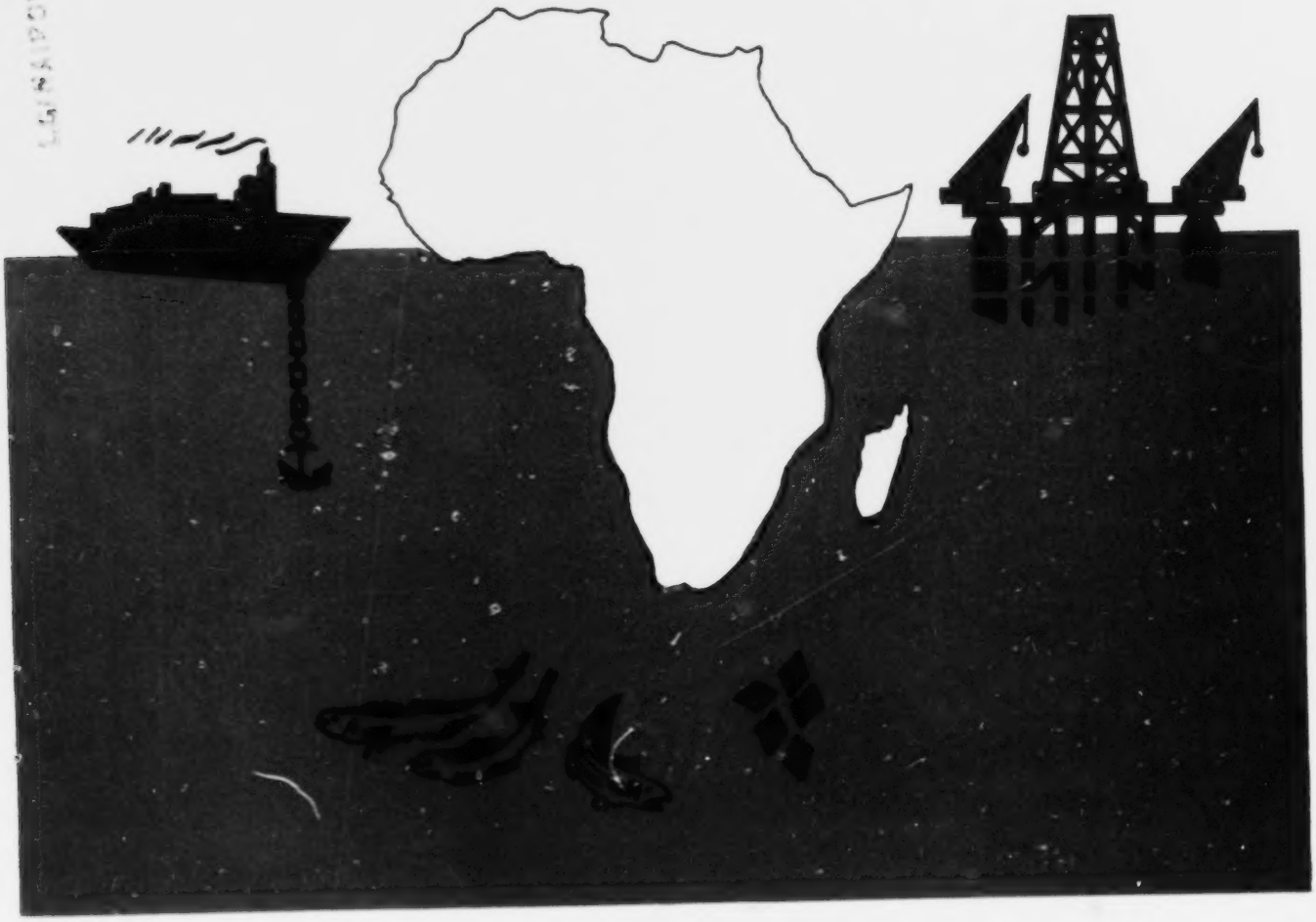
ECA/NRD/RSU/1/89

UNITED NATIONS

LEGAL FRAMEWORK AND MACHINERY EXISTING IN SELECTED COASTAL STATES OF THE INDIAN OCEAN AND RED SEA FOR THE CONDUCT OF MARINE-RELATED ACTIVITIES FOR LEGAL OFFICERS DEALING WITH MARINE-RELATED ACTIVITIES



ECA 1989

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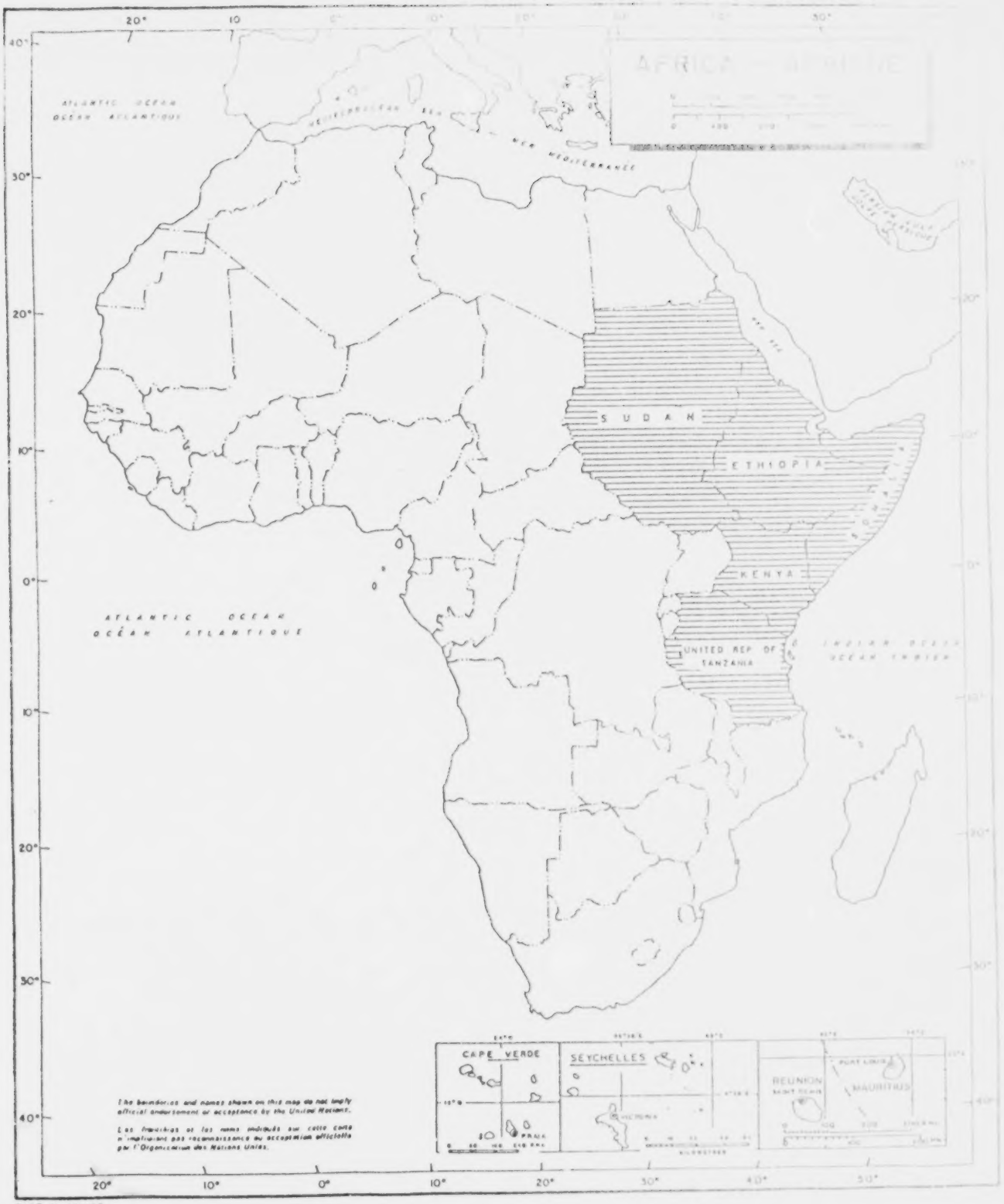
UNITED NATIONS
ECONOMIC COMMISSION FOR AFRICA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INDIAN OCEAN
OCEAN INDIEN
ATLANTIC OCEAN
OCÉAN ATLANTIQUE
CAPE VERDE
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REUNION
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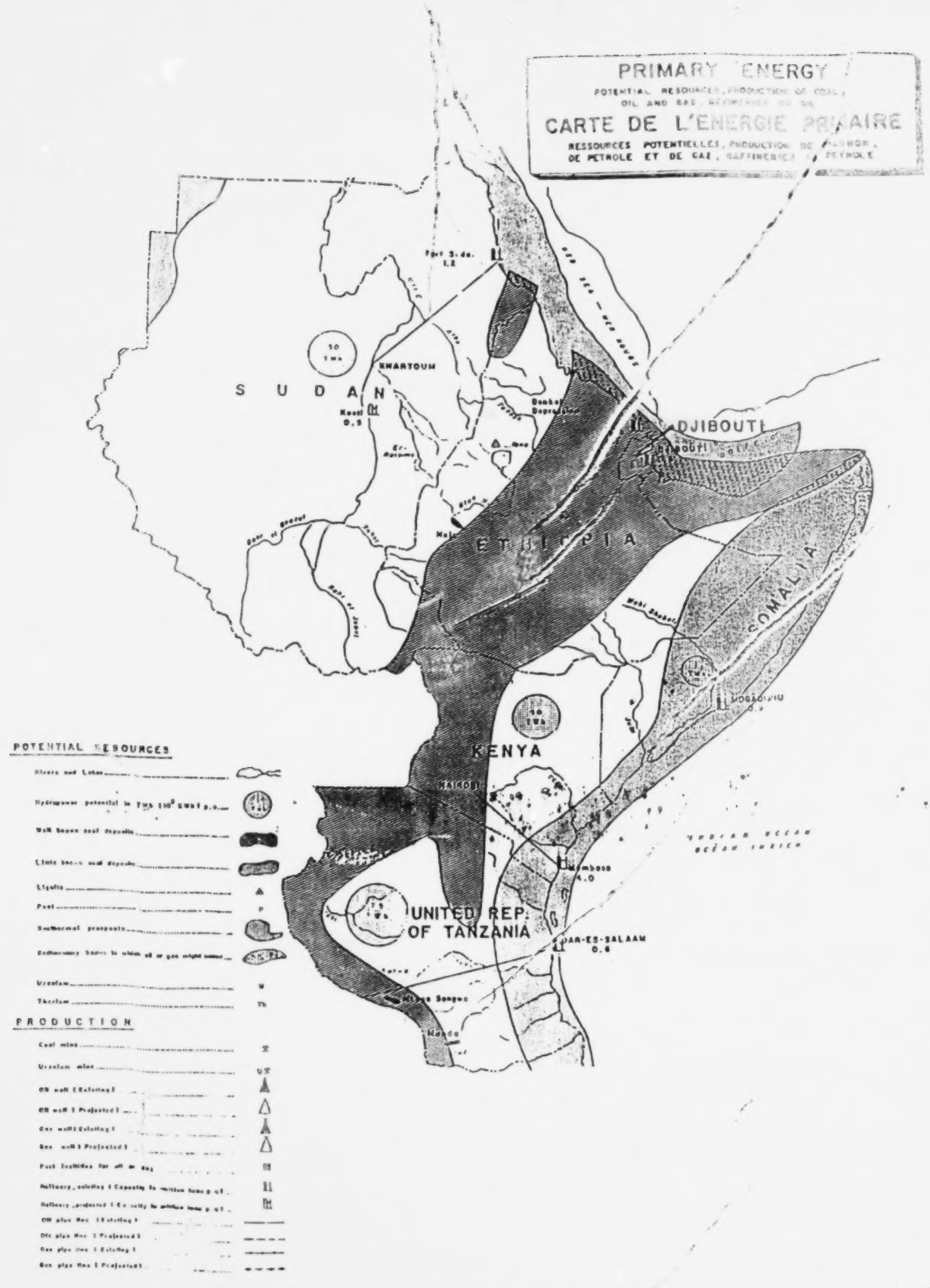
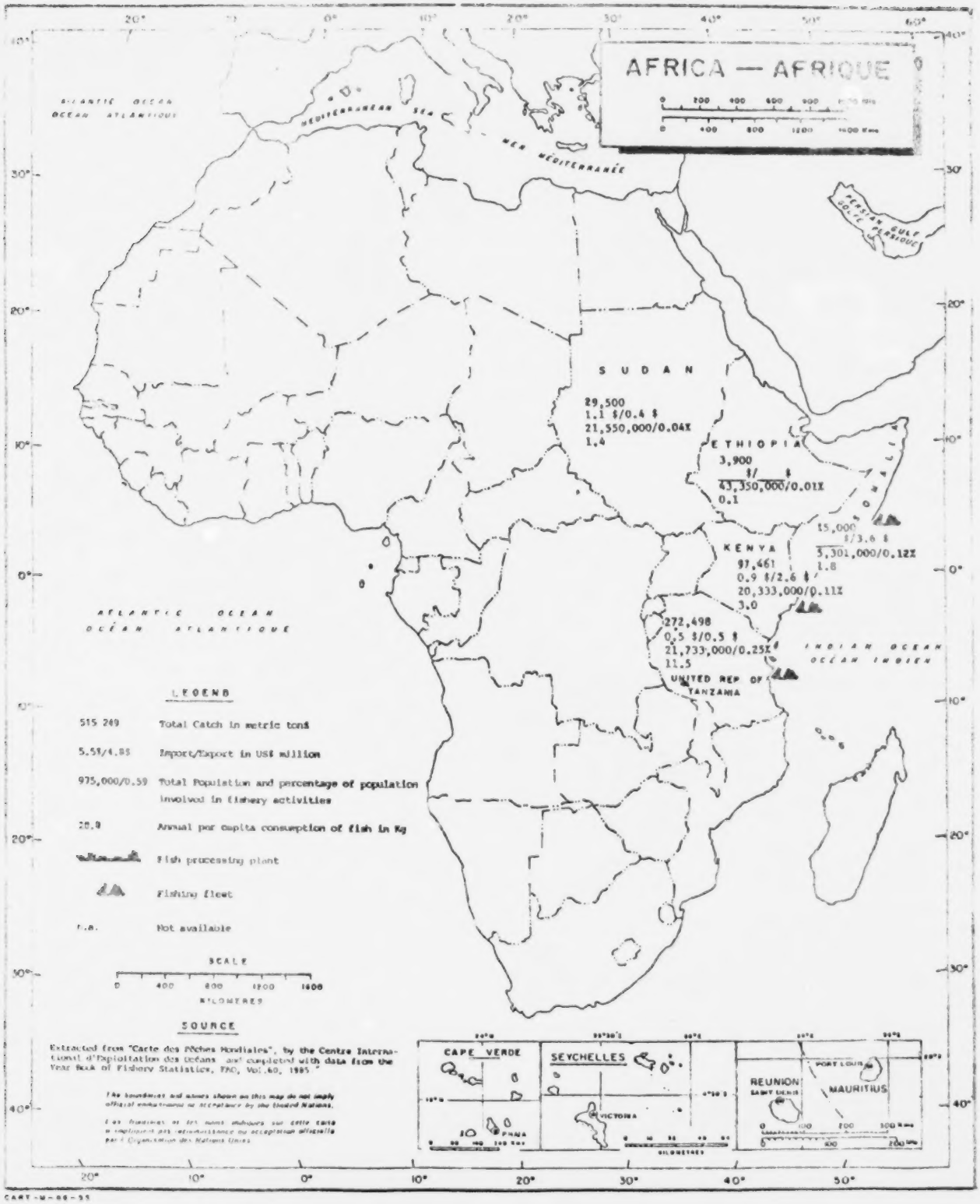

PRIMARY ENERGY
POTENTIAL RESOURCES, PRODUCTION OF COAL, OIL AND GAS, REFINERIES OF OIL
CARTE DE L'ENERGIE PRIMAIRE
RESSOURCES POTENTIELLES, PRODUCTION DE CHARBON, DE PETROLE ET DE GAZ, RAFFINERIES DE PETROLE
SUDAN
KHARTOUM
ETHIOPIA
DJIBOUTI
SOMALIA
KENYA
UNITED REP. OF TANZANIA
DAR-ES-SALAAM
Mombasa
INDIAN OCEAN
POTENTIAL RESOURCES
PRODUCTION

EAST AFRICAN FISHERIES MAP



Foreword

The Economic Commission for Africa (ECA), realizing the growing importance that marine resources could play and the far-reaching impact of marine resources development of member States, especially with the adoption in 1982, of the United Nations Convention on the Law of the Sea, is giving particular attention to assist the African member States to take up this new challenge. In this regard, the ECA established the Marine Affairs Programme to assist the African States to address the problems of the development of capabilities for the exploration, exploitation and management of the marine resources and will, in that context, further assist them to develop and strengthen policy and legislative machinery. ECA has been instrumental in carrying out a series of studies and holding a number of intergovernmental meetings on marine science and technology in Africa.

This paper presents a survey of the legal frameworks and machineries existing in selected coastal States of the Indian Ocean and Red Sea for the conduct of marine-related activities for the legal officers dealing with marine-related activities. It points out constraints the African countries face in their endeavour to explore and exploit marine resources. The constraints range from the lack of technological capabilities to weaknesses in the existing policies and legislation for the conduct of marine-related activities. The marine resources development policies of the coastal States visited are reviewed and proposal for multinational co-operation in marine resources development among Ethiopia, Kenya, Somalia, Sudan and Tanzania is made. It is also suggested that there should be strengthened co-operation not only in policy formulation for marine resources development, but also in research and development, training and establishment of data banks on information and statistical data on the marine resources and activities. The recommendations are made to assist the coastal States to build-up and strengthen their capabilities in the development, utilization and management of their marine resources and to lay good framework and machineries for the conduct of marine-related activities for the socio-economic advancement of the African states.

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Proposal for Multinational Co-operation in Marine Resources Development among Ethiopia, Kenya, Somalia, Sudan and Tanzania

Introduction

This report was commissioned by the Resources of the Sea Unit of the Natural Resources Division of the Economic Commission for Africa (ECA). Realizing the growing importance of the resources of the Sea, ECA adopted for the biennium a broad programme which addresses itself to the problem of the development of capabilities for exploration, exploitation and management of the resources of the sea in the region and will in that context, assist member States to develop and strengthen policy and legislative machinery.

This report on the legal framework and machinery for the conduct of marine-related activities for legal officers dealing with marine-related activities, which is based on information available to the author, is one of the technical publications envisaged as one of the means of implementing this broad programme and will deal mainly on the living resources of the sea as this is an area where these States can achieve a lot in the short term. Whilst similar reports will be prepared for other States, this report confines itself to the following countries: Ethiopia, Kenya, Somalia, Sudan and the United Republic of Tanzania.

Ethiopia is bordered by Djibouti, and Somalia to the east, Sudan to the west, Kenya to the south and the Red Sea to the northeast.

The Ethiopian coastline extends 1,011 km along the Red Sea. The continental shelf offers 3,500 km of sea-bed for trawling. The major coastal cities and ports' are Massawa and Assab.

Kenya is bordered by Ethiopia and Somalia to the north, Uganda to the west and Tanzania to the south and the Indian Ocean to the east. The Kenyan coastline extends for approximately 640 km bordering the Indian Ocean fringed by coral reefs 1/2-2 km offshore except where there is an influence of river systems which are characterized by extensive mangrove forests. Marine fisheries are currently under-developed and constitutes only 10% of the fish landed. There is room for improvement as marine fisheries represent half the country's potential. The coastal population is slightly over 1 million making for overall population densities of 100-200 km^2. Mombasa the most important coastal city and port has a population of 341,148.

The Somalia Democratic Republic is located on the outermost tip of the "Horn of Africa" and is bordered by the Gulf of Aden to the north, the Indian Ocean on the east and Kenya, Ethiopia, Djibouti on the west. Somalia has an extremely long coastline of 3,200 km, virtually the longest coastline in developing Africa of which 1,000 km in the north borders the Gulf of Aden and the remainder borders the Indian Ocean. The major coastal cities are Mogadishu the capital and chief seaport with an estimated population of 500,000, Berbera, Kismayu, Merca, Bosaso and Brava. The coastline mainly consists of a series of sandy beaches broken up by rocky outcrops including low limestone cliffs. There are extensive fringing reefs all along the coast, and even though the continental shelf is generally 10-15 km in width, it extends 50-60 km in the northeast. The coastal climate is influenced by the northeast, southwest monsoons.

The Democratic Republic of the Sudan has common boundaries with nine countries: in the north with Egypt, in the northwest with Libya, in the west with Chad and the Central African Republic, in the south with Zaire, Uganda and Kenya and in the east with Ethiopia and the Red Sea. Sudan's coastline extends for approximately 600 km. along the Red Sea and the main city and port is Port Sudan.

The United Republic of Tanzania is the largest East African country and is bordered in the north by Kenya and Uganda, on the west by Rwanda, Burundi and Zaire, on the southwest by Zambia and in the south by Malawi and Mozambique.

The United Republic of Tanzania comprises, the mainland of Tanzania and the islands of Zanzibar and Pemba. The two islands lie approximately 32-35 km from the Indian Ocean coastline. Zanzibar is about 72 km long by 38 km wide, whilst Pemba is 67 km long by 22 km wide.

Dar-es-Salaam is the capital and principle port of the mainland with a population of 272,821 and Zanzibar town is the capital of Zanzibar with a population of 67,819.

The coastline of Tanzania is primarily characterized by sweeping sandy beaches, rocky outcrops and developed fringing coral reefs, punctuated by extensive mangrove forests at the mouths of large rivers. It has a coastline of 800 km bordering the Indian Ocean. The entire coastal area is influenced by the northeast and southwest monsoons.

There is a broad geographical similarity in the characteristics of the coastal areas of the sub-region. The coasts of East Africa can be treated together as continental-type coastlines. These coastlines are broadly characterized by alternating regimes of beaches and rocky outcrops with fringing coral reefs and large estuarine areas characterized by delta formations and extensive growth of mangroves.

Having similar coastline characteristics, and being neighbouring coastal states and sharing the similar constraints of being poor and not being able to explore and exploit their marine resources efficiently and effectively there is undoubtedly a need for these countries to co-operate by pooling their resources so that they may benefit and enhance the economic development of their marine resources. These factors make it desirable for these countries to be studied together.

The aim and objectives of the report is to identify the existing legal framework and machinery for the conduct of marine-related activities to assist legal officers dealing with marine-related activities with respect to the United Nations Convention on the Law of the Sea. With the signing of the United Nations Convention on the Law of the Sea on the 10th December 1982, in Montego Bay, Jamaica, which African States played a significant role in its shaping, it has become imperative for all African States, particularly coastal States to enact national legislation on living and non-living resources so as to take full advantage of all aspects of the Convention for the effective development of their economies and the preservation and control of their marine resources and to establish legal machinery that will enhance the implementation of such legislation.

Since the efficient implementation of the Convention would in many respects require co-operation between the States in such fields as patrolling the seas, pollution control, the harmonization of laws, machinery and standards and the adoption of common positions, consideration should also be given to the establishment of a related common institution for the States. The need for this has been recognized by many African States.

In this respect attention must be drawn to the recent meeting of the twenty-eighth session of the Asian-African Legal Consultative Committee (AALCC) held at Nairobi, Kenya, from 13-18 February, 1989 (to which Kenya, Tanzania and Sudan three of the five countries under study, are member States). One of the important agenda items of the meeting was the issue of the Law of the Sea. In this connection the Committee decided that the new Kenyan legislation giving effect to the Convention should be used as a model by the member States of AALCC.

The exploration and exploitation of the resources of the sea mainly involves two common uses, these being the living and non-living resources. The living resources include fish, shell fish, sea weed and algae as important protein sources, for human consumption, as well as for agricultural feed purposes. The non-living resources include, minerals, oil and gas as a power source, fine grain sand for industrial purposes and wave and tidal power. The exploration and exploitation of these resources are, however, unfortunately heavily linked to foreign participation due to insufficient capital which the African States suffer from and the high financial cost, lack of trained manpower, technology and the administrative and legislative capabilities involved in undertaking such ventures.

The waters of these coastal States are abundantly stocked with high-priced fish species which have been harvested for generations by distant water fishing fleets by European and South East Asian countries depleting their stocks with the sole interest of high fish catch and profits. These distant water fishing fleets practicing over-exploitation and using fishing gear and equipment which have also effected the depletion of non-target species have little regard to the long-term environmental damage they have caused. The over-exploitation of their fisheries resources and the management of other marine resources can only be achieved through harmonization and co-operation.

The management aspect of the exploration and exploitation of the marine resources is also a matter of great importance. The efficient development of these resources must be considered not only from the purely profitable aspect which undoubtedly is an important factor but also from a conservational and preservational view so as to prevent the rapid depletion of these resources and damage to the respective ecological systems involved. Furthermore, the finer parts of management involves the development of by-product industries and other such linkages, which involves adequate technologically qualified manpower along with the required technology and technological transfer.

African States must ensure that the marine resources within their territorial jurisdiction and economic benefits derivable therefrom, are under their effective control. This requires the necessary legislation, investment and other agreements and administrative machinery. More specifically this

would require composite legislation on fisheries to provide for the full utilization of the fishery resources, stricter control of both local and foreign fishing vessels, the regulation of fishing in the extended fishery waters following the declaration of the 200 mile Exclusive Economic Zone (EEZ), the promotion of the development of traditional and industrial fisheries through measures such as: providing extension and training services; conducting research and surveys; promoting co-operation among fishermen; promoting arrangements for the orderly marketing of fish; and providing infrastructure facilities. Furthermore the director of Fisheries should be provided with ample ammunition to enforce those measures.

In this respect Kenya and Somalia have enacted fisheries legislation designed to deal with these problems.

Provisions of the United Nations Convention on the Law of the Sea

Acting on Resolution 2760 (XXV) the General Assembly convened the Third United Nations Conference on the Law of the Sea, with a mandate to adopt a Convention dealing with all matters relating to the Law of the Sea, including the protection of the marine environment. All the States concerned in this study are party to the Convention.

For the first time, all aspects of the uses of the oceans of the world are to be governed by international law, namely, the United Nations Convention on the Law of the Sea. In this Convention, such issues as navigation, jurisdictional zones including the high seas, archipelagic States, land-locked States, fisheries, minerals and other resources of the sea are dealt with.

Within this seventeen part Convention the provisions which deal with the protection and preservation of the marine environment are contained in Part XII. Other provisions directly related to the conservation of marine living resources are under articles 61, 63-67, 117-120.

The Convention recognizes the right of the coastal State to establish a 12 nautical mile territorial sea and, beyond that, an EEZ extending up to 200 miles from the coastline in addition to its rights over the resources of the continental shelf.

Within the EEZ, the coastal State is accorded "sovereign rights" for the purpose of exploring and exploiting, conserving and managing the sea resources, whether living or non-living, of the seabed and subsoil and the superjacent waters. The coastal State also has jurisdiction within this zone with regards to the establishment and use of artificial islands, installations and structures, marine scientific research, and the protection and preservation of the marine environment. Within a coastal State's EEZ, other States are assured the right to exercise freedom of navigation, over flight, laying of submarine cables and other freedoms provisioned under the Convention. In exercising these rights, they are, however, required to comply with the laws and regulations adopted by the coastal States in accordance with the provisions of the Convention and other international laws consistent with the Convention.

Coastal States under the new regime of the sea are assured enormous new potentials for the attainment and utilization of the resources of the sea. However, the EEZ imposes important responsibilities on the coastal State. The coastal State is responsible for the proper conservation and management of the living resources within the zone. in particular for ensuring that those resources are not endangered by over-exploitation. Conservation and management measures are to be designed and adopted to maintain or restore populations at levels capable of producing the maximum sustainable yield. Coastal States are also required to promote the objective of optimum utilization of the living resources, determine the "allowable catch" of the living resources in its zone, determine its own capacity to harvest them and where it does not have the capacity to harvest the entire "allowable catch", to give other States access to the surplus. In giving access to the surplus of the "allowable catch", the coastal State is required to take into account the significance of those resources to its own economy as well as other national interests, the requirements of the developing States in the sub-region and the need to minimize the economic dislocation in States whose nationals have habitually fished in the zone or made substantial efforts in research and the identification of stocks. Access to these resources by other States is subject to compliance with the laws and regulations of the coastal State.

In the event of fish stocks occurring in the EEZ's of two or more States, the concerned States are required under the provisions of the Convention to seek appropriate management measures. Similar required management agreements apply for co-operation between fishing and coastal States with respect to fish stocks extending beyond the limits of the EEZ, and also with respect to highly migratory species. Under the Convention special provisions are also made for the conservation of anadromous, catadromous, sedentary species and marine mammals.

With respect to pollution, States are to take all possible measures to prevent, reduce and control pollution of the marine environment and to ensure that activities which are under their jurisdiction do not cause pollution damage to areas beyond their national jurisdiction or to other States. Within the Convention, provisions are provided, and provides that States should co-operate on a global, and as appropriate on a regional level to draft further rules, standards as well as recommend procedures and practices which are consistent with the Convention.

Furthermore in an event of marine pollution, States are to notify other States likely to be affected, of any danger to the marine environment and are to co-operate with other States within the area to draw up contingency plans and combat the pollution. States are to co-operate in promoting the exchange of information, studies and research. Provisions are also made for the co-operation in monitoring and environmental assessment. Developing States are to be given preferential treatment by international organizations and are to receive scientific and technical assistance.

States are required to adopt national legislation, rules, on land-based sources of marine pollution, arising from the exploration and exploitation of the seabed, from installations under their jurisdiction, from dumping of wastes and other matter and pollution from or through the atmosphere. Further action at the regional level is envisaged through the harmonization of

national policies or the establishment of regional rules, standards, recommended practices and procedures. The prevention of pollution measures, from activities relating to the international seabed are provided for under a general provision in Part XI.

With respect to pollution from ships, States are required to establish international rules and standards and at the national level, regulations and laws governing vessels flying their own flag, that will have at least the same impact as those international rules and standards. States may adopt their own laws and regulations on vessels in their territorial sea, however, these laws and regulations are not to hamper the innocent passage of foreign vessels. States may apply to the competent international organization to have the area declared a special area where such rules and standards are inadequate to meet the special circumstances of a particular vulnerable area in its EEZ.

The Convention contains a number of provisions on enforcement with particular reference to coastal States' rights, namely, the enforcement of controls over land-based sources of marine pollution, pollution from activities on the seabed under their jurisdiction and from atmospheric sources, which is reserved to States, and over pollution from activities on the international seabed to the International Sea-Bed Authority, in co-operation with the States Parties. The International Sea-Bed Authority will enable African and all other countries party to the Treat, to join forces in the exploration and exploitation of these resources in particular manganese nodules. Specifically the International Sea-Bed Authority is the organization through which member States shall organize, control and administer the resources of the sea-bed and ocean floor and subsoil beyond the limits of national jurisdiction. The Authority recognizes the equality of all of its member States. The Authority is to initiate studies and recommendations for the promotion of international co-operation concerning activities in the sea-bed and ocean floor and subsoil and to encourage the progressive development of related international law. The Authority is to decide on the equitable sharing of the financial and other economic benefits derived from the exploitation of the sea-bed and place at the disposal of developing States available technology in the exploitation of the resources of the sea-bed, and the possibilities of joint ventures with other member States. Dumping controls are to be enforced by a flag State in its territory, a coastal State in its EEZ or on its continental shelf, and a port State where the dumping vessels are loaded. Regarding the discharges from ships, responsibility in insuring the compliance with international rules and standards is vested with the flag State and in the port States for vessels voluntarily in its ports where evidence indicates it has discharged

Activities of United Nations Agencies

A number of programmes have been initiated during the past two decades by various United Nations Agencies in relation to oceans and its resources, namely in the field of oceanography, fisheries and the protection and conservation of the marine environment.

A brief survey of these activities, within the sub-region by some of the major United Nations Agencies will be discussed.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

The main objectives of the Marine Sciences Division of UNESCO is the development of marine sciences at the national and regional level and the global promotion of marine science.

The programme is characterized by close collaboration with the international non-governmental scientific community to develop research programmes that link scientists in developing and developed countries. The development of marine science manpower and infrastructure is combined with these research programmes to strengthen marine science in countries developing their capabilities in this field.

Furthermore, UNESCO Regular Programme activities are used to catalyse the establishment of extra-budgetary marine science development projects which are seen as a larger scale implementation phase aimed at the same long-term goals.

Inter-governmental Oceanographic Commission (IOC)

The Commission was established in 1960 by UNESCO as the principal inter-governmental organization engaged in the promotion of scientific research on oceanography. One of the research programmes undertaken by IOC in its initial years was the International Indian Ocean Expedition. The programme provided for the establishment of an international coordination group entrusted with the task of data exchange, preparation of atlases, processing and analysis of data and the publication of results. By its Resolution 2172 (XXI), the General Assembly broadened the scope of activities recommending the development of a long-term and expanded programme of oceanic exploration and research. Another step towards increasing international co-operation in oceanography was the adoption of an International Decade of Ocean Exploration (IDOE). A number of programmes were initiated under this project to deal with the marine environment and the exploitation of the living and non-living resources of the seas.

Food and Agriculture Organization (FAO)

The FAO from its very beginning has been concerned with the protection, conservation and development of fishery resources which constitute one of the major food sources. In 1948, FAO established an Advisory Body Indo-Pacific Fishery Council whose objectives included the encouragement and coordination of research, improvement in fishing methods and assistance to governments in

developing countries and dissemination of information. In 1967, the Indian Ocean Fishery Commission was established. The objectives of its programme include:-

i. The strengthening of the capabilities of coastal countries and groupings of countries to manage and develop their fisheries;

ii. the promotion of rational management and the full use by the developing countries of ishery resources in their economic zones; and

iii. the strengthening of the efforts of developing countries to secure a greater share of and higher benefits from the living marine resources.

The objectives were to be achieved through a medium-size action plan with the aim to meet the most urgent needs of the developing States and studies to determine how fisheries in economic zones can most efficiently be developed and managed on the long-term basis. With this in mind the Commission proposed the establishment of a Committee for the development of the South-West Indian Ocean, Bay of Bengul in addition to the Committee on the Management of Indian Ocean Tuna and the Committee for the Gulf and Red Sea Programme, which is involved in the Development of Fisheries in areas in the Red Sea and Gulf of Aden.

The work programme under the auspices of FAO in relation to the Indian Ocean are namely:-

i. Fisheries statistics;

ii. State of stocks;

iii. International Indian Ocean Exchange Survey and Development Programme

(a) Research and survey activities;

(b) Fishery development opportunities;

iv. Management;

(a) Tuna and other stocks

v. Co-operation with other regional fishery bodies; and

vi. Establishment of subsidiary bodies.

In addition, the Indian Ocean Advisory Programme is intended to provide technical assistance to the developing countries of the region, to aid coastal States in creating, establishing or strengthening parastatal bodies engaged in fishery development and giving advice on joint venture arrangement or drafting national legislations.

Furthermore the conclusion of the 1984 FAO World Conference on Fisheries have particular significance to African countries with respect to the adoption

of a global strategy for fisheries development and management in light of the United Nations Law of the Sea Convention. The global strategy includes five action programmes which relate to planning, development and management of fisheries, the development of small-scale fisheries, aquaculture development, international trade in fish and fishery products and the role of fisheries in alleviating protein deficiency. Financial provisions were also made for the continued activities of the various regional fishery bodies in Africa. In addition special resolutions were adopted for greater assistance to land-locked countries and greater technical and economic collaboration in fisheries development and management among developing countries.

United Nations Environment Programme (UNEP)

UNEP has four main programmes relevant to the United Nations Convention on the Law of the Sea, namely: the Regional Seas Programme, the Environmental Law Programme, the Conservation Programme, and the Global Environmental Monitoring System.

UNEP's Regional Seas Programme

UNEP has co-ordinated a number of Regional Seas Programmes together with Action Plans in co-operation with several agencies such as the IMO, WHO, FAO, UNESCO and IOC.

The aim of UNEP's Regional Seas Programme is to promote a regional approach for the protection of the marine environment to cope with the problems which have arisen from the careless economic growth with respect to the environment and the use of marine resources. In order to achieve this goal UNEP has established a network of regional action plans, designed and promoted to adoption of regional convention and international protocols in order to promote the environmental management of the regional seas, as well as involved itself in the task of developing new regional agreements taking into account the principles which have emerged from the Third United Nations Conference on the Law of the Sea.

The Eastern African Action Plan

The development of the Action Plan was called upon by the decision 8/13 C of 29 April, 1980, for the protection and development of the marine and coastal environment of the Eastern African region. The Action Plan together with the three legal documents, namely the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, the Protocol concerning Protected Areas and Wild Fauna and Flora and the Protocol concerning Co-operation in Combating Marine Pollution in Cases of Emergency were adopted and signed at the Conference of Plenipotentiaries at Nairobi in June 1985.

The Eastern African region has been defined as including the waters of the Indian Ocean within the jurisdiction of the following countries: Comoros, France, (Reunion), Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia and the United Republic of Tanzania.

The general objectives of the Action Plan is to enhance the co-operation among member States of the Eastern African Regional in the assessment, development and management of the marine and coastal environment of the region through coordinated national and regional policies. More specifically to continue strengthening national capabilities to assess and manage coastal environmental processes initially through three projects, namely;

EAF/5: Promoting the establishment and management of protected marine and coastal areas in the Eastern African Region.

EAF/6: Research and monitoring related to the sources, levels and effects of pollutants in the Eastern African Marine and Coastal Environment.

EAF/7: Institution and Coordination of National Contingency Plans in the Eastern African Region.

The Red Sea and Gulf of Aden Action Plan

This Action Plan was initiated by the Arab League Educational, Cultural and Scientific Organization (ALECSO). The Action Plan and the Convention and a Protocol on Co-operation in Emergencies was adopted and signed at the Conference of Plenipotentiaries at Jeddah in January, 1982.

The Action Plan includes the Red Sea, the Gulf of Aden, the Gulf of Suez, the Suez Canal to its connection with the Mediterranean and the Gulf of Agaba.

The following parties have so far signed the legal agreement; Democratic Republic of Yemen, Djibouti, Jordan, Palestinian Liberation Organization (PLO), Saudi Arabia, Somalia, Sudan and Arab Republic of Yemen.

The aim of the Action Plan is the conservation of the marine environment and coastal areas with the intention that measures for the protection and development of the marine and coastal environment will lead to human health and well being.

The Action Plan is intended to meet the environmental needs as well as enhance the environmental capabilities of the member States and aimed to be implemented primarily through coordinated national and regional activities.

The Environmental Law Programme provides principles and guidelines on the conservation and utilization of living and non-living national resources and legal aspects which concern the environment related to the mining of sea-bed minerals under national jurisdiction.

The Conservation Programme has been involved in the preparation of the marine component of the World Conservation Strategy and also supports other organizations involved in conservation such as the World Conservation Union (previously known as IUCN).

The Global Environmental Monitoring System coordinate activities for the collection and evaluation of data for the monitoring of the environment and environmental assessment on a global scale.

The International Maritime Organization (IMO)

The IMO began its activities in 1959. It is responsible for developing technical and related standards for the safety of navigation and the prevention and control of marine pollution from ships and by dumping. The IMO treaties have helped set up a framework for the safe and efficient transport of goods and passengers by sea and the protection of the seas from pollution.

The future and current activities of IMO are directed towards assisting all countries, especially developing countries to improve marine transportation and related maritime activities in accordance with international standards on safety and the prevention of marine pollution.

The Asian-African Legal Consultative Committee (AALCC)

At the 22nd Session of the Committee, Sri Lanka requested the initiation of a study of economic scientific and technical co-operation in the use of the Indian Ocean.

A preparatory Meeting of the Indian Ocean States took place in June, 1985, where recommendations to the First Indian Ocean Marine Affairs Co-operation Conference (IOMAC) were endorsed. The framework of co-operation includes:

i. Integration of the marine sector into natural development strategies;

ii. Rights and needs of the Land-locked and geographically disadvantaged States;

iii. Acquisition and dissemination of information;

iv. Harmonization and strengthening of management arrangements;

v. Co-operation through marine affairs institutions;

vi. Policy orientation within international organizations; and

vii. The Co-operation at International Conferences.

Although the United Nations Agencies have and are continuing to play an important role in the field of marine affairs, enhancing the capabilities, utilization and management of the marine resources and coastal environment, the results of their programmes are not likely to bare sufficient fruit without intensive effort and commitment by the States themselves. This being due to the fact that financial constraints on the United Nations and other inter-governmental organizations make it quite impossible for them to undertake full-scale programmes needed for the development of ocean resources. The initiatives taken by such bodies are to be regarded as steps to generate interest, to work as a catalyst, to provide the lead for comprehensive plans of actions and generally supportive of the efforts by the Governments themselves.

1. EXISTING MACHINERY FOR THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT

The various ministries and autonomous agencies which are involved in the protection and management of the marine resources and coastal environment are described below.

1.1 The Council of Ministers

The Council of Ministers is the highest executive and administrative organ of the Peoples Democratic Republic of Ethiopia accountable to the National Shengo. Amongst others the Council of Ministers shall issue regulations, directives, decisions and orders in accordance with the Constitution, submit legislative proposals to the National Shengo, ensure the implementation of laws enacted, and ensure the development, conservation and utilization of the natural resources of the country. The Council shall also coordinate, supervise and give overall direction to ministries, state committees, commissions and other government organs directly under it.

1.2 Ministry of State Farms Development

The powers and duties of this Ministry are defined by Proclamation No. 8 of 1987. The main objectives of this Ministry amongst others is to ensure the expansion of animal husbandry, dairy farming, horticulture, fishery, bee husbandry, crop and cereal farming and other similar activities, and cause the sale and distribution of state farm products.

1.3 Ministry of Mines and Energy

This Ministry's powers and duties are defined by Proclamation No. 8 of 1987. Its main objectives amongst others are to collect and maintain a depository of geological, mineral and energy data, issue general directives on energy development and utilization, protect the mineral resources of the country, undertake petroleum and gas prospecting, and protect the interests of the State in mining ventures in which it is a major shareholder.

1.4 Ministry of Transport and Communications

The powers and duties of this Ministry are defined by Proclamation No. 8 of 1987. The main aim amongst others of this Ministry is to expand and supervise maritime and transit services as well as supervise trans-boundary land, air, and sea transport services, register and inspect air and sea transport vehicles, and in co-operation with other appropriate government organs, ensure the prevention of transport accidents and pollution of the territorial waters of the country as well as provide for search and rescue operations and for taking the necessary measures in the event of air or marine transport accidents. A number of autonomous agencies function under this Ministry.

1.4.1 Marine Transport Authority

In 1978 the Marine Transport Proclamation No. 139 of 1978 established an autonomous Marine Transport Authority, having its own juridical personality.

The purposes of the Authority are:

i. to promote and maintain an efficient, economical and regular marine transport service and develop an overall marine transport service system;

ii. to expand an efficient system of port service and facilities;

iii. to ensure a high degree of safety in marine transport;

iv. to prevent marine pollution; and

v. generally to seek ways and means for the promotion and development of all aspects of marine transport.

The Minister has the power to issue regulations for the proper execution of this Proclamation.

1.5 Ministry of National Defence

This Ministry's powers and duties are defined by Proclamation No. 8 of 1987. The main duties of this Ministry amongst others is to ensure the proper observance of international obligations arising from maritime and aviation laws, treaties and agreements except in so far as specific power therefore has legally been delegated to another government organ, and through co-operation with other government organs, be responsible for the defence of the country's territorial waters and islands.

1.6 Ministry of Foreign Affairs

The powers and duties of this Ministry are defined by Proclamation No. 8 of 1987. One of the duties of this Ministry amongst others is to ensure the enforcement of rights and obligations arising from treaties and agreements signed by the Ethiopian Government except insofar as specific power has legally been delegated to another government organ, register and keep all authentic copies of international treaties and agreements between the Government and other States as well as international organizations, and perform the functions of a depository of multilateral treaties and agreements when the government is such a depository.

1.7 Ministry of Agriculture

The powers and duties of this Ministry are defined by Proclamation No. 8 of 1987. The duties amongst others of this Ministry are to implement directives concerning the proper conservation development and utilization of

the country's forest, wildlife and soil resources; ensure the development of fisheries as well as natural resources and issue and implement directives concerning chemical insecticides imported into the country. The Department of Fisheries, the Natural Resources Protection and Development Main Department and the Forest and Wildlife Conservation and Development Authority function under this Ministry.

1.7.1 Department of Fisheries

The primary responsibility of fisheries in Ethiopia both inland and coastal lies with the Department of fisheries. Its main objectives are to enhance the development and management of the fisheries resources. More specifically the Department has the following duties and responsibilities amongst others:

i. to formulate policies relating to the conservation of fish and other living resource and issue guidelines;

ii. prepare short and long term plans for the development and management of fisheries and other living resources;

iii. provide guidelines for the improved production of fish and other living resources in terms of quality quantity and variety, popularize fish consumption through the preparation of educational materials;

iv. issue guidelines and procedures relating to research activities to enhance production;

v. collect statistical data relating to the production of fish and other living resources;

vi. organize training programmes for staff and participate in training activities; and

vii. establish relationships with international organizations and governments.

1.7.2 The Natural Resources Protection and Development Main Department

The duties and responsibilities of this Department amongst other are:

i. on the basis of guidelines and decisions issued by higher authorities, coordinate activities that fall under the Main Department and formulate new strategies, issue guidelines and undertake implementation;

ii. following the National Central Planning Policy guidelines, undertake studies relating to natural resources development and on the basis of this, formulate policies, prepare plans and strategies, upon approval, for implementation;

iii. execute the legal mandate of the Ministry;

iv. register national parks and other reserved wildlife areas;

v. study the population of species, especially rare wildlife species and protect the natural habitat as well as enforce wildlife legislation;

vi. conduct studies on soil management and use;

vii. ensure that wildlife protected areas maintain international standards and encourage the dissemination of wildlife legislation;

viii. protect and preserve habitats of rare wildlife and birds for scientific research and educational purposes;

ix. prepare projects for funding by foreign countries and international organizations;

x. provide educational information relevant to the conservation and development of natural resources; and

xi. identify land use plans on the basis of the evaluation of land resources and government development policy.

1.7.3 The Forest and Wildlife Conservation and Development Authority

The Authority was created by the 1980 Proclamation. The Authority is now known as the Wildlife Conservation Organization and lies under the Natural Resources Protection and Development Main Department.

The objectives of the Organization are to:

- ensure the proper protection, development, rational utilization and management of forest and wildlife resources of the country;

- establish and administer national parks, game reserves and other conservation areas;

- agitate the broad masses to have better and greater participation in the development, protection, rational utilization and management of forest and wildlife.

Amongst others the powers and duties of the Organization are to enforce legislations concerning forest and wildlife resources, grant permission for establishment of any hotel camp or other facilities in any national park, game reserve or other wildlife conservation area, and delegate to Government offices or mass organizations the powers and duties given to it under this Proclamation.

The management consists of Forest and Wildlife Conservation and Development Council, a General Manager and the necessary staff.

1.8 Ministry of Justice

This Ministy's powers and duties are defined by Proclamation No. 8 of 1987. The duties amongst others of this Ministry are to assist in the preparation of draft laws when requested by other ministries, government organs or mass organizations and to participate in the preparation of all draft laws to be submitted to the Council of Ministers.

1.9 The Ministry of Urban Planning and Development

The powers and duties of this Ministry are defined by Proclamation No. 8 of 1987. This Ministry has the legal power concerning the preparation of over all plans, which includes undertaking studies pertaining to the social, economic and other factors of urban centres to enhance the development of urban centres. Specifically the Ministry has the legal power to ensure that buildings conform to established standards.

1.10 Science and Technology Commission

The powers and responsibilities of ministries specified in Article 16 of Proclamation No. 8 of 1987 shall apply to Commissions.

The duties amongst others of this Commission is to prepare and upon approval, implement science and technology policies and plans that enhance the development of the country and promote and develop the national science and technology capability.

1.11 National Water Resources Commission

By Order No. 15 of 1971 the National Water Resources Commission was established as an autonomous organ of the Government.

The purpose of the Commission amongst others is to make proper provisions for the:

i. adequate supplies for the generation of hydro-electricity and for transportation, navigation and recreation; and

ii. adequate facilities for drainage, the safe disposal of sewage and industrial effluents and the control and prevention of pollution and disease.

The Commission may carry out its activity by delegation of authority to any Public Authority or Water Authority for the efficient administration of the activities of the Commission. The Commission may issue Regulations for the proper carrying out of the provisions of this order.

Water and Sewerage Authority

This Authority was established by Proclamation No. 298 of 1972. The jurisdiction of the Authority extends to all areas within the limits of the City of Addis Ababa and to all dams, catchment areas and water pipelines.

The responsibilities and duties of the Authority amongst others are:

i. to provide for the protection of water against pollution, contamination and wastage;

ii. to regulate the disposal of sewage and require owners to make connections to the system of sewers provided;

iii. to establish priorities as to the use and categories of water users and the system of sewers;

iv. to grant permission to any person to dig waterwells for personal use within its jurisdiction after obtaining and registering the structural and site plan of the well; and

v. to order the closure of wells if found that water extracted from the wells are used for commercial purposes or contaminated or polluted.

1.12 Training and Research Institutes

The University of Addis Ababa offers some courses in the field of marine science both at the undergraduate and postgraduate levels. The Department of Geology offers a postgraduate M.Sc. course in marine geology. The University of Asmara also offers courses in marine science.

A project has been worked out with the assistance of UNESCO to establish a marine research station on the Red Sea Coast at Assab under the University of Addis Ababa or at Massawa under the University of Asmara, however, this has not yet materialized. A maritime institute is being established near Assab, expected completion is in 1990. Nautical and Engineering Officers training will be offered.

At present there is no important research activity going on in marine science.

2. SURVEY AND ANALYSIS OF EXISTING LEGISLATION RELEVANT TO THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT

2.1 Limits of National Jurisdiction

Maritime Proclamation No. 137 of 1953

The territorial waters of Ethiopia are defined as extending from extremity of sea-board at maximum annual high tide of the Ethiopian continental coast and of the coasts of Ethiopian islands, in parallel line on the entire sea-board and to an outward distance of twelve nautical miles. In the case of Dahlac Archipelago, the territorial waters' sea-ward limit is defined in the Federal Revenue Proclamation No. 126 of 1952, which defines these territorial waters as a quadrilateral consisting of lines joining the outermost northeastern and southeastern islands with the innermost northwestern and southwestern islands. In the case of pearl and other sedentary fisheries, the seaward limit of the territorial waters shall extend to the limits of the said fisheries. The Ethiopian Government have full dominion over the said waters and exclusive control over the natural resources within and beneath the said waters. Fishing of all sorts, including pearl fishing, within the said territorial waters shall be reserved exclusively to nationals of the Empire except as provided in article 9 of the Proclamation. Article 9 states that the right to engage in fishing in the territorial waters is reserved to Ethiopian merchant ships and vessels, but allowed for fishing rights to be accorded to foreign vessels for an interim period of 3 years.

Ethiopia has played an active role in the shaping, and has signed, the United Nations Convention on the Law of the Sea. The Ethiopian territorial sea of 12 nautical miles conforms to that of the provision under the Convention. However, one difficulty arises with respect to the declaration of an EEZ, this relates to the nature and geographical features of the Ethiopian marine coast. The Red Sea being semi-enclosed, and having a width at its widest points of 250 miles at its narrows 11 miles inevitably raises delimitation issues. Ethiopia is also shelf-locked with the Yemen Arab Republic. The inter-locking of maritime jurisdiction in the Red Sea also raises problems of management of shared stocks. A regional solutions to these problems would be required. Under the United Nations Convention the Law of the Sea, such states are required to seek agreement on appropriate management measures.

2.2 Legislation Relevant to Marine Pollution

2.2.1 Marine Pollution by Ships

(a) Operational Discharge by Ships

Ethiopia does not have any Legislation as such on the prevention of marine pollution by ships. The Ethiopian Sea Ports Administration Regulations of 1981 have been revised, however, have not been approved by the Government. The Maritime Authority at present is awaiting specialist from UNCTAD who will review and up-date these Port Regulations. However, these regulations do not cover marine pollution by ships outside the Port

jurisdictions. These regulations although not ratified by the government are used as guideline rules. It is important for Ethiopia to adopt legislation not only to prevent and control marine pollution within its port but also within the territorial seas, and having become a member of IMO in 1976, Ethiopia should adopt the relevant IMO conventions on the control and prevention of marine pollution and other hazardous wastes, such as, the Oilpol 1954 Convention. The convention applies to all ships flying the flag of a Party to the convention and to all substances considered as harmful. The objective of the Convention is to control operational spills of oil, noxious substances, sewage water, and garbage. An important provision of this Convention is that it not only enhances the States rights and possibilities of effective surveillance but also enchances the control of the pollution of their waters.

(b) Accidental Discharge by Ships

(i) The Prevention of Maritime Accidents

Ethiopia has no specific legislation for the prevention of maritime accidents except for a few provisions in the Port regulations of 1981 presently being amended and Rules in the Maritime Code of 1960 in the event of collisions.

Ethiopia has, however, ratified the IMO Conventions on maritime safety which are the main legal instrument for the prevention of accidents and to prevent discharge into the sea of oil or other hazardous substances. These are:

- the International Convention for the Safety of Life at Sea, (SOLAS) 1974 and Protocol;
- the International Convention on Load Lines, (LL) 1966; and
- the International Regulations for Preventing Collisions at Sea, (COLREG) 1972.

The main objective of the SOLAS 1974 Convention and its Protocol is to specify minimum standards for the construction, equipment and operations of ships compatible with their safety. Flag States are responsible for ensuring that ships under their flag comply with its requirements. Certificates are prescribed in the Convention for this purpose. The COLREG 1972 Convention is a code of good conduct at sea which should be introduced into their national legislation.

(ii) Prevention and Control of Pollution after Maritime Accidents

No specific Legislation governing the prevention and control of marine accidental pollution exist as such in Ethiopia except for the following vague provision:

Maritime Code of 1960

Article 229: Rules Applicable to Collisions. Where a collision occurs between ships, the compensation due for damages caused to the

ships, or to any property or persons on board thereof, shall be settled in accordance with the following provisions.

Article 230: Accidental Collision. If the collision has been occasioned by a fortuitous accident or if it cannot be shown that any of the parties is to blame, the damage shall rest where it falls.

Article 231: Collision fault of one ship. When any damage to ships, goods or persons has been caused by a collision between ships, and one party alone is to blame, he shall be liable for any loss or damage caused thereby.

Article 234: Extent to which damages are made good.

Article 230-233: Shall apply to making good damages which a ship has caused to another ship, or to goods and persons on board either ship, either by the execution or non-execution of a manoeuvre or by the non-observance of the prescribed regulations concerning prevention of collisions at sea, even where no collision has taken place.

Article 235: Duties of the Masters. After a collision, the master of each of the ships in collision shall, so far as he can do so without serious danger to his ship, here crew and passengers, render assistance to the other ship, her crew and her passengers. He shall as far as possible make known to the other ship the name of his ship, the port to which she belongs and the port from which she comes to which she is bound.

Article 363: States that any master who after collision with another ship fails to give to the master of the vessel with which he came into collision any of the following particulars, namely:

- the name of his ship;
- the port of registration;
- the port of destination and last call,

shall be guilty of an offence and shall be liable on conviction to a fine not exceeding Eth. $1000.

Although legislation exist on the liability and action in an event of a marine accident, there are no provisions included in the prevention and control of pollution. Ethiopia should also adopt regulations for the intervention in case of emergencies in its territorial sea. Having established new legislation it would be in their interest to ratify the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, Brussels, 1969, and its 1973 Protocol relating to intervention on the high seas in cases of pollution by substances other than oil.

Under the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, Brussels 1969, coastal States faced with imminent danger to their coastline or related interests from pollution or threats of pollution of the sea by oil following maritime casualty may take action on the high seas to avert the danger, however, the severity of action taken must be in proportion to the damage which the coastal State has sustained or with which it is threatened. In an event of excessive action taken the coastal State may be required to pay compensation. Provision is also made for the compulsory submission of any disputes between parties to conciliation and arbitration. The 1973 Protocol Relating to Intervention of the High Seas in Cases of Maritime Pollution by Substances Other than Oil extends the application of the provisions of the 1969 Convention to intervention on the high seas in cases of pollution by substances other than oil which are liable to cause serious damage. These substances comprise products which endanger human health, harmful to marine flora and fauna, detrimental to natural beauty and inhibit other legitimate uses of the sea.

(iii) Contingency Plan to combat accidental pollution

At present Ethiopia has no national contingency plan for dealing with oil pollution of the sea or other hazardous substances. It is most important for Ethiopia in collaboration with the IMO to adopt a national contingency plan especially within the jurisdiction of its ports and territorial seas in light of the potential danger of accidental and deliberate discharge of oil and other hazardous substances from ships.

(iv) The Liability and Compensation for Pollution Damage

Ethiopia has no specific legislation on this subject matter besides a few provisions in the Maritime Code of 1960, Title II, Chapter I on the Liability of Shipowners and Managers. The shipowner is liable for the default of the master, the members of the crew, the pilot or any other person in the service of the ship in the discharge of their duties. The shipowner is also liable in respect of obligations undertaken by the master in matters relating to the ship and maritime adventure.

Ethiopia would benefit by ratifying conventions which aim to uniformity in international rules regarding liability and compensation for oil pollution damage, and adopt national legislation to this end. The international conventions which Ethiopia would benefit from are:

- International Convention on Civil Liability for Oil Pollution Damage, 1969.
- Protocol of 1984 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969;
- International Convention on the Establishment of International Fund for Compensation for Oil Pollution Damage, 1971;

- Protocol of 1984 to amend the International Convention for the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971; and

- International Convention Relating to the Limitation of the Liability for Maritime Claims, London 1976.

The 1969 International Convention on Civil Liability for Oil Pollution Damage, defines the shipowner as the responsible person for possible damage due to oil pollution. The shipowner is responsible for all pollution resulting from a leakage or discharge of oil from his ship without having to prove it. This Convention applies only to tankers and exclusively to damage by pollution occurring in the territory, including the territorial seas of a contracting State and to measures intended to avert or reduce such damage.

The 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage aim, is to guarantee compensation for victims of oil pollution damage, in particular, it provides compensation for the victims when the shipowner and guarantor are not able to meet their financial obligations. It establishes a fund formed primarily by contributions by importers of oil in proportion to the quantities received.

The 1976 International Convention Relating to the Limitation of the Liability for Maritime Claims, raises the limits of liability extending them from shipowners to salvors

2.2.2 Pollution Resulting from Exploration/Exploitation of the Sea-bed Minerals

Mining Proclamation No. 282 of 1971

This Proclamation regulates the conduct of activities in the Empire of Ethiopia and the seabed and subsoil of the submarine area beneath the high seas contiguous to its territorial waters relating to the prospecting of, exploration for and the mining, storage, processing, transportation and disposal of minerals.

Minerals are classified as:

- metalliferous and non-metallic minerals including precious minerals, radioactive and nuclear minerals;

- petroleum and natural gases;

- mineral water and thermal water; and

- quarry substances.

Minerals are defined as:

- substances of economic value forming part of or found within the earth's surface and produced or deposited there by natural process including petroleum, natural gas, quarry substances, mineral and thermal water;

- petroleum includes mineral oil and related hydro carbons and oil shales;

- quarry substances are defined as gravel, sand and stone in their natural state and other substances the Minister may declare.

The lease holder has the obligation to pay compensation to any person including the owner or processor of the surface of the land on which he shall mine, for any damage to property (which includes trees and crops) or injury to persons caused in the process of prospecting, exploration or mining operations. If, however, the Minister is of the opinion that such damage or injury is likely to occur he may require the applicant to give security against such damage before granting the mining right. The Minister may decline for reasons of public interest any area to be closed to prospecting, exploration and mining either generally or for an indefinite period. The Minister shall also issue regulations outlining the rights, duties and limitations under which a holder of an exploration licence shall explore. When there has been a breach of any of the provisions of the Proclamation and regulations which may include the failure of the lessee to mine any mineral within a reasonable time after discovery or mining contrary to principles of conservation, the Minister may revoke the licence.

Mining Regulations No. 396 of 1971

These Regulations were issued by the Minister of Mines pursuant to authority vested in him by Article 53 of the Mining Proclamation No. 282 of 1971.

The holder of a prospecting permit shall have a non-exclusive right of prospecting upon the lands within area of his permit. No prospecting permit will be authorized except with the consent of appropriate authorities within areas of holy sites, cultivation, municipal land, railways, streets, roads, reservoirs, previously allocated land for exploration and land which the Minister may by regulation declare a closed area either temporarily or permanently to prospecting, exploration or mining.

The prospecting permit may be revoked if, among others, the holder is not prosecuting the prospecting operation with all reasonable diligence, skill and exactness in accordance with the provisions of the Proclamation and present Regulations.

Part III, Exploration licence requires the applicant to delimit the proposed exploration area. The application of an exploration licence contains amongst others information on technical and financial resources and the mineral or minerals for which the applicant is applying for.

The holder of an exploration licence subject to the provisions of the Proclamation and the exclusive right to explore his area and shall in the exercise of his licence be subject to the provisions of the Regulations. Furthermore the applicant for a mining lease shall comply to the provisions of the Proclamation and Regulations.

Although legislation exists on mining activities, there is no specific legislation on the mining of the marine and coast environment, furthermore there is no legislation on the protection of the marine and coastal environment. It is important for legislation to be established to this end.

Petroleum Operations Proclamat on No. 295 of 1986

This Proclamation governs petroleum operations carried out by a contractor within the Territory of Ethiopia. The Territory of Ethiopia includes the land territory, internal water, islands, archipelagic waters, territorial sea and its beds and subsoil, EEZ and continental shelf.

Crude oil is defined as: all hydrocarbons regardless of specific gravity which are produced at the well head in a liquid state at atmospheric pressure, asphalt and ozokerites and the liquid hydrocarbons known as distillate or condensate, obtained from natural gas by condensation or extraction.

Natural gas is defined as: hydrocarbons that are in a gaseous phase at atmospheric conditions of temperature and pressure, including wet mineral gas, dry mineral gas, casinghead gas and residue gas remaining after the extraction or separation of liquid hydrocarbons from wet gas and non hydrocarbon gas produced in association with liquid or gaseous hydrocarbons.

Petroleum is defined as: crude oil and natural gas and includes hydrocarbons produced from oil shales or far sands.

The Minister has the power amongst others to:

- prepare model petroleum agreements including Production Sharing or Modern Concession Agreements, which will serve as basis for the negotiation of a petroleum agreement;
- inspect and ensure that the activities of the contractor are carried out in accordance with the provisions of the petroleum agreement; and
- determine in consultation with the appropriate State organs, the areas in which petroleum operations may not be permitted for reasons of national interest and security.

Any petroleum agreement will provide for amongst others:

- the safety requirements and programmes and other matters related to the working of employees engaged in petroleum operations; and
- requirements relating to environmental protection.

With regards to conducting standards, contractors shall conduct petroleum operations in accordance with generally accepted international petroleum industry standards and practices and in a manner which is compatible with the conservation of petroleum and other resources and the protection of human life, property and the environment.

The following laws are inapplicable to petroleum operations, namely the Mining Proclamation No. 282 of 1977, the Mining Regulations No. 396 of 1971 and the Joint Venture Establishment Proclamation No. 295 of 1983.

This Proclamation does make provisions for the protection of the marine and terrestrial environment, however, the provisions are vague, simply stating that petroleum operations should be conducted in a manner which is compatible with the conservation and protection of the environment. Specific legislation on the protection and conservation of the environment should be included.

Furthermore Ethiopia should ratify the 1958 Convention of the High Seas which stipulates that all States are required to establish regulations to avoid pollution of the sea by oil discharged from ships or pipelines or resulting from the exploration and exploitation of the sea-bed and its subsoil.

2.2.3 Marine Pollution by Dumping of Wastes and Other Matter

Ethiopia has no specific legislation regarding marine pollution by the dumping of wastes and other matter. Ethiopia would benefit by ratifying the Conventions on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 1972. The Corvention contains a blacklist of prohibited items (e.g. mercury and mercury compound) and a grey list of substances (e.g. lead) which are not totally prohibited but the dumping of which is subject to special control. Furthermore the Convention regulates the deliberate disposal at sea of wastes from vessels, aircrafts or other man made structures at sea, excluding operational discharges. More specifically the Convention defines three categories of wastes:

- wastes, the dumping of which is prohibited;
- wastes, the dumping of which requires a prior special permit; and
- all other wastes, the dumping of which requires a prior general permit.

Ethiopia having no legislation to invoke its provisions should adopt legislation to this end.

2.2.4 Marine Pollution from Land-Based Sources

Ethiopia has as such no legislation governing the control and preventions of the marine environment from land based sources of pollution, nevertheless it has some basic legislation.

Public Health Rules of 1943, L.N. 25

Article 1.: Controls the disposal of garbage and refuse from buildings. There is, however, no legislation on specific substances but dangerous substances are regulated by the Pharmacy Department of the Ministry of Health and the extension Department of the Ministry of Agriculture.

Article 1(b): Also prohibit throwing, depositing, burning etc. of any dirty, refuse, garbage or other noxious matters on any street or public place. The introduction of waste into water sources is also prohibited.

Considering that land-based sources of pollution are the biggest contributor to marine pollution, it is important for Ethiopia, even though at present it might not pose as a serious problem, establish comprehensive legislation to control and prevent the pollution of its coastal waters. This should also include legislation on soil erosion, which has become a major problem within the region.

2.3 Legislation Relevant to Coastal Areas Management and Development

Ethiopia has not Legislation in regards to the management, protection, conservation and development, of the coastal areas. However, at present, a committee has been formed under the National Planning Office, which is carrying out a study on aspects of development on the Environment. Ethiopia should take steps to establish legislation on this subject matter.

2.4 Legislation Relevant to Marine Living Resources

2.4.1 Fisheries Legislation

Maritime Proclamation No. 137 of 1953

IV Protective Measures:

Article 9: The right to transport persons or goods, for profit, from one point to another on the Ethiopian coasts, and the right to engage in fishing, towing or salvage within the territorial waters of Ethiopia are reserved to Ethiopia merchant ships and vessels and, with the exemption of pearl fishing to such foreign ships and vessels as may be accorded these rights for limited periods within three years from the date of this Proclamation, by Our Ministry of National Defence, upon the application of marine industries and enterprises duly registered under the regulations of the said Ministry.

VII Confiscation of Ships or Vessels:

Article 98: The regulations that may be issued by the Ministry of National Defence for the control and supervision of fisheries within the territorial waters may provide that any ship or vessel engaged in fishing without authorization as required by law or using means of fishing prohibited by the said regulations, as being destructive to the marine life, shall be subject to condemnation and confiscation by decree of a division of the Federal High Court sitting in admiralty in an appropriate proceeding. Any ship or vessel condemned and confiscated pursuant to the provisions of this article shall be transferred in title.

Final provisions

Article 102: The present law shall not be construed to exclude the application within the territorial waters or maritime domain of Ethiopia or upon Ethiopia ships on the high seas, of any other federal laws including federal laws made in execution of international treaties or obligations or concerning foreign and interstate commerce or external and interstate communications.

The Maritime Code of 1960

The Maritime Code of the Empire of Ethiopia (Proclamation No. 164 of 1960) stipulates:

Article 4: Qualification for owning Ethiopian ships

A ship shall not be deemed to be an Ethiopian ship unless owned wholly by persons of the following descriptions, namely:

i. Ethiopian subjects;

ii. bodies Corporate established under, and subject to the Laws of Ethiopia and having their principal place of business in Ethiopia; and

iii. foreigners domiciled in Ethiopia and having their principal place of business in Ethiopia.

Article 5: Ships treated as Ethiopian Ships

The following shall be Ethiopian ships:

i. ships abandoned at sea and salvaged by ships flying the Ethiopian flag; and

ii. ships confiscated under the provisions of this Code.

Article 6: Ethiopian Ships

The following shall be Ethiopian ships:

i. only Ethiopian ships shall sail under the Ethiopian flag;

ii. coastal fishing, coastal trade between Ethiopian ports and tonnage in Ethiopian ports shall only be undertaken by Ethiopian ships.

The term "coastal fishing" is not defined, however, reference to article 9 of the Maritime Proclamation No. 137 of 1953 would indicate that the restriction is intended to apply to fishing in the territorial waters of Ethiopia.

Commercial Code of 1960 (Proclamation No. 166)

This Code is a comprehensive legislation dealing with all aspects of the countries commercial and economic life. Although article 2, Book I, Title I, excludes persons and business organization carrying on maritime trade from the purview of the Code, a number of provisions of the Code are nevertheless relevant to maritime trade transactions. Where the Maritime Code is silent on any aspect of maritime trade activity, the provisions of the Commercial Code apply.

Joint Ventures Establishment Proclamation No. 235 of 1983

The Proclamation states in the preamble that participation of foreign capital with Ethiopian public capital in joint ventures and the transfer of foreign technology through such participation can play a role in the realization of the primary objective of the Ethiopian revolution which is the all-round development of the national economy and the achievement of a higher standard of living for the broad masses, for which it is necessary to develop the natural resources of the country. The Proclamation invites foreign capital in all areas of national economy except investment on precious metals, public utilities such as electric light and power, telecommunication and water, bank etc. insurance, transport and domestic trade. Exception can, however, be made by the Council of Ministers.

Ethiopian has no legislation on fisheries as such. It is most important for Ethiopia to adopt legislation to this end in order to protect and control its living resources. Legislation has, however, been drafted and submitted to the Council of Ministers, awaiting approval and adoption. In this event she must ensure that all aspects of the living resources of the sea, protection, conservation, utilization, joint-ventures, licensing and management are included. Even though a joint venture proclamation does exist, it is vital that there by specific legislation governing the exploitation of living resources of the sea.

2.4.2 Endangered Species

Ethiopia has no specific legislation on this subject matter and has not ratified any of the international conventions with regards to the conservation of natural resources and endangered species. Nevertheless it has some basic regulations.

The Wildlife Conservation Regulations, 1972, L.N. No. 416

Schedule 6: Except in accordance with the provision of Article 25 and 22 of the Regulations the following animals shall be protected. Amongst the list of protected animals are Dugong dugon.

The Wildlife Conservation (Amendment) Regulations, 1974, L.N. No 445

Schedule VI: Subject to Article 10 and in accordance with the provisions of Article 25 of the Regulations, the following animals and birds, Dugong dugon being amongst the list, may not be hunted throughout Ethiopia, except for important scientific research or to protect their survival. It would be

in the interest of Ethiopia to ratify such conventions and adopt national legislation to this end. The international conventions Ethiopia should consider ratifying are:

i. the Convention on International Trade in Endangered Species of Wild Fauna and Flora, (CITES) 1973;

ii. the Convention on the Conservation of Migratory Species of Wild Animals, 1979; and

iii. the African Convention for the Conservation of Nature and Natural Resources, 1968.

Furthermore Ethiopia should adopt legislation for the protection of marine and coastal areas. No specific legislation relating to marine and coastal reserves exist as such. It is most important for Ethiopia to protect its unique coastal and marine habitats.

2.4.3 Protected Areas and Reserves

Ethiopia has no specific legislation governing marine and coastal protected areas. Nevertheless Ethiopia has some basic legislation pertaining to this subject matter.

Forest and Wildlife Conservation and Development Proclamation No. 192 of 1980

Under this proclamation the powers and duties of the organization are to co-operate with the appropriate Government offices, demarcate, register and administer state forests, national parks, game reserves, sanctuaries, and areas for afforestation, controlled hunting and scenic attractions.

The Wildlife Conservation Regulations, 1972, L.N. No. 416

These Regulations are issued by the Minister of Agriculture pursuant to authority vested in him by Article 4 of the Game Proclamation of 1944 (Proclamation No. 61 of 1944) and Article 10 of the Wildlife Conservation Order of 1970 (Order No. 65 of 1970) and upon the recommendation of the Wildlife Conservation Board.

Article 5: No person shall reside, hunt, cultivate, graze cattle or livestock, fell trees, burn vegetation or exploit the natural resources in any manner within a National Park unless such activities are used for the development and management of the park.

Article 10: No personal shall hunt any game animal unless he is the holder of a licence or permit.

Article 22: Special Permit for Hunting Game Animals for Scientific Purposes: The Organization may, before granting Special Hunting permits, require the applicant to satisfy him that the game animal in question, is sought for the use by a recognized scientific or zoological institution or for other investigation or research.

Article 25: Game Animals Prohibited for Hunting. No personal shall be allowed to hunt game animals listed in schedule 6 hereof except in accordance with Article 22.

Summary

Ethiopia at present has very limited legislation governing the protection, development and management of the marine and coastal environment. With regards to the living resources, present legislation is practically non-existent. Although a new draft fisheries legislation has been submitted to the Council of Ministers for approval it is vital that the legislation will include all aspects of the scope of fisheries namely: the exploration, exploitation, protection, conservation, licencing, joint venture agreements and management of their marine living resources.

The implementation of fisheries management will require management powers by the Fisheries Department, namely powers to declare closed seasons and or areas and limitations on mesh sizes and the size of fish caught as well as measures aimed purely at the development of fisheries. Most important, however, will be the power to control fishing efforts, in order to minimize the uncontrolled exploitation, which would reduce the economic income available.

In order to promote artisanal fisheries and protect them from foreign vessels, some coastal States have adopted regulations that reserve a small coastal belt in which they usually operate and have the capacity to operate for their exclusive use. Foreign vessels in such cases would only be permitted to fish beyond that limit This the Government may consider.

The final component of any fisheries legislation is the requirement of enforcement and penal provisions. The extension of fisheries jurisdiction creates increased enforcement burden on the coastal State. Where foreign fishing is concerned, one way to a leviate this burden is by placing a degree of responsibility on the flag State for ensuring compliance by its vessels with the terms and conditions of the agreement and provisions of the national fisheries laws and regulations. Enforcement legislation should, however, include powers to stop, board, inspect, seize and arrest fishing vessels in violation of the fisheries legislation as well as powers of hot pursuit. Fisheries legislation should also include provisions relating to seizure, custody and forfeiture of vessels, catch and gear in cases of violations of the law.

In regard to all aspects of marine pollution Ethiopia equally has very limited legislation. Ethiopia should consider ratifying the appropriate international conventions and establish national legislation to this end. Although a draft Sea Ports Administration Regulations are currently being established with the aid of UNCTAD specialists, these regulations will only consider marine pollution within the jurisdiction of the ports and harbours. Legislation will still not cover the remaining coastal areas and territorial seas. Ethiopia needs to have comprehensive legislation dealing with the whole scope of marine pollution including substances other than oil or oily mixtures. Regulations on the exploitation and exploration of mineral

resources should include specific and comprehensive legislation on the protection and conservation of the marine environment.

Ethiopia has no central agency or other governmental body to which responsibility for the formulation of environmental policy is being specifically assigned and there is no central environmental ministry or other operating agency with enforcement powers in respect to environmental matters. However, certain Ministries, governmental departments and bodies are given power to initiate policies on those environmental issues which fall within the purview of their areas of operation. Furthermore no defined mechanisms exist for coordinating the efforts of the different agencies dealing with environmental problems. However, some of these agencies operate through joint committees in matters of common interest.

With respect to the limits of the territorial seas, Ethiopia conforms to the provisions of the United Nations Convention on the Law of the Sea. However, with regards to the 200 nautical mile EEZ, Ethiopia will have to come to an agreement with the Yemen Arab Republic regarding the rights amongst others for exploration and exploitation and management of shared fish stocks, due to the narrowness of the Red Sea, as prescribed by the Convention.

KENYA

1. EXISTING MACHINERY FOR THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT

The various ministries and autonomous agencies which are involved in the protection and management of the marine resources and coastal environment are described below

1.1 Ministry of Environment and Natural Resources

This Ministry was established in 1979 and is responsible primarily for standard-setting on general environmental matters not primarily the concern of other Ministries. Where the Ministries have a primary concern, the Ministry of Environment and Natural Resources plays a coordinating role. A number of autonomous agencies lie under this Ministry.

1.1.1 The National Environment Secretariat

The Secretariat was established in 1974 under the executive authority which the constitution confers upon the President (Act No. 5 of 1969).

The Secretariat lays down the country's general policy on environmental management, makes recommendations, as well as assesses the potential impact of proposed activities as they arise. The Secretariat takes a broad approach in assessing the impact of a given activity to ensure that regard is paid to the totality of the environment rather than individual resources or ecosystems. It also has the power to enforce its recommendations. The functional operations of the Secretariat is divided into Divisions, namely: Impact Assessment, Natural Resources, Environmental Law and Environmental Education.

1.1.2 The Inter-Ministerial Committee on Human Environment

This Committee is composed of all the government ministries and statutory bodies whose functions include the primary responsibility in matters related to the environment. The Committee is convened by the National Environment Secretariat as a substantive department of the Ministry of Environment and Natural Resources. The committee discusses policy issues and makes recommendations to the Government and its views on investment proposals which come up before the New Projects Committee are decisive.

1.1.3 The New Projects Committee

This Committee amongst others, is involved in granting consent for proposed activities. However, it is normally concerned with the financial aspects of an investment proposal and leaves the Water Quality and Pollution Control Section of the Ministry of Water Development to examine the proposals from the point of view of its impact on water resources in addition to the proposed methods of waste disposal.

1.1.4 The Kenya National Anti-Pollution Committee

This Committee works on strategies for combating marine pollution incidents within the Mombasa harbour area, the territorial waters and the EEZ. The Committee is convened by the National Environment Secretariat and is comprised of a range of government ministries, parastatal bodies, the Kenya Navy, and non-governmental organizations such as beach hotels with the aim of protecting the coastal water from pollution. The central purpose of the Committee is to pool resources in readiness to combat any oil spill which may occur within the coastal waters or at the harbour. Resources available to the Committee are pooled from the institutions represented on it, including those of the Navy

1.2 Ministry of Water Development

The main objective of this Ministry is to enhance water development and supplies, control water catchment areas and control water quality and pollution. Under this Ministry lies the Water Apportionment Board and the Water Quality and Pollution Control Section which deals with environmental aspects such as the impact on water quality.

1.2.1 Water Quality and Pollution Control Section

This Section is involved in examining proposed activities from the point of view of its impact on water resources in addition to the proposed methods of waste disposal. Effluent standards are then laid down depending on the wastes to be generated by the proposed activities.

1.2.2 The Water Apportionment Board

This Board was established under section 25 of the Water Act. The Board controls the quantitative and qualitative use of water and deliberates and decides whether or not to issue a permit to an applicant for water use for any purpose.

1.3 Ministry of Planning and National Development

This Ministry's functions involve amongst others the management of natural development planning, the evaluation of economic issues, resources surveys and remote sensing and regional co-operation.

1.4 Ministry of Transport and Communications

This Ministry's functions amongst others includes the management and development of ocean and sea transport and harbours. The Kenya Port Authority lies under this Ministry.

1.4.1 The Kenya Ports Authority

This Authority was established by the Ports Authority Act of 1978. The Port Authority is responsible for the operation, and the construction and management of the principal maritime ports of Kenya and for the regulation of their use by any vessel. The Minister has the right to make regulations subject to the provisions of any law relating to merchant shipping to provide for the examination and certification of masters, mates and engineers and the registration, licensing, inspection and control of vessels.

1.5 Ministry of Energy

This Ministry's functions amongst others includes the management and development of oil and other fossil fuels exploration and exploitation.

1.6 Ministry of Local Government and Physical Planning

The functions of this Ministry amongst others includes the management of physical planning and urban development.

1.7 Ministry of Foreign Affairs and International Co-operation

The functions of this Ministry amongst others include dealing with International Organizations, International Treaties, Conventions and Agreements.

1.8 Ministry of Tourism and Wildlife

This Ministry's functions amongst others include the management, development and promotion of tourism and wildlife, game control and preservation.

1.8.1 The Wildlife Conservation and Management Department

This Department has the responsibility for conserving wildlife and habitats for scientific, cultural, and aesthetic benefits, and incidental economic gains, as well as evaluating alternative forms of land use (including land covered by sea) where conservation measures may be a concern. The Department may gazette National Parks, National Reserves, Protected Areas, Local Sanctuaries, or protect individual species. Responsibility also extends to marine animals, their habitats and marine "lands".

1.9 Ministry of Agriculture

The functions of this Ministry amongst others include the management and development of land use and soil conservation.

1.10 Ministry of Health

The functions of this Ministry amongst others include the management and development of overall sanitary services.

1.11 Ministry of Industry

The functions of this Ministry amongst others include the establishment of an industrial development policy and the implementation of industrial research findings.

1.12 Ministry of Research, Science and Technology

This Ministry's functions amongst others include the establishment of a national research development policy, the application and transfer of appropriate technology, the control of the use of research information, research inventory and dissemination and liaisoning with research institutes and other research bodies. Under this Ministry lies the National Council of Science and Technology.

1.12.1 The National Council for Science and Technology

This Council was established by the Science and Technology Act of 1977. The Council is required to determine priorities for scientific and technological activities in Kenya and to advise the Government on a national science policy. Specifically the Council is called upon amongst others to:

(a) determine priorities for scientific and technological activities in Kenya in relation to the economic and social policies of the Government and its international commitments;

(b) advise the Government on a national policy including general planning and the assessment of the requisite financial resources;

(c) advise the Government on the scientific and technological requirements for the conservation of the natural and social environment of Kenya;

(d) ensure co-operation and coordination between the various agencies involved in the machinery for making the national science policy;

(e) consider and advise generally on all scientific activities including:

i. scientific and technical manpower (actual and potential);

ii. science education, not only at the advanced level in respect of the quality and quantity of potential manpower training, but also at lower levels in respect of general science education for the public; and

(iii) scientific documentation, statistics, surveys and general information;

(f) advise on suitable organizational arrangements for planning, managing and coordinating scientific activities of various levels including the setting up of new Research Committees, and of research councils, research establishments and technical services; and

(g) review generally and advise on the programmes and budgets for the promotion of the research and related scientific activities proposed by Ministers concerned and ensure that they are in harmony with national science policy.

The Act also establishes four Advisory Research Committees as separate but associated bodies in the fields of agriculture, medicine, industry and natural sciences. Their functions amongst others are to:

(a) advise, within its sector of scientific responsibility all appropriate Ministries on:

i. the details of the research programmes and projects required to implement the research priorities arising from the national science policy;

(b) advise the Ministries concerned and the Council on such organizational changes, including the creation of institutes, as are required to implement or further efficiency of, the research required by Kenya;

(c) encourage general education in the scheduled sciences and advise on the sponsoring of post-graduate training, and to advise Ministries and the council on the manpower and educational requirements for research; and

(d) maintain a close liaison with foreign and international bodies or ogranizations with similar interests.

1.13 Research and Training Institutes

i. The Kenya Marine and Fisheries Research Institute is devoted to fisheries research and other marine science fields with a view to provide baseline research work upon which planned development and exploitation of all marine resources can be based. In Co-operation with FAO/DANIDA training courses are offered in marine science.

ii. The University of Nairobi, Faculty of Science offers some undergraduate courses in several departments which are marine oriented as well as graduate programmes in marine botany and hydrobiology.

2. SURVEY AND ANALYSIS OF EXISTING LEGISLATION RELEVANT TO THE PROTECTION AND MANAGEMENT OF THE MARINE AND COASTAL ENVIRONMENT

At present a new Bill has been submitted to parliament, The Maritime Zones Bill of 989. The bill seeks to give legal effect to the Presidential Proclamation of 28th February, 1979, declaring Kenya's EEZ. The Bill provides for and delimits the territorial waters, establishes and delimits the EEZ, provides for the activities in respect of which Kenya shall exercise sovereign rights within the EEZ, and the rights of other states in the EEZ. Furthermore the Bill makes provision for the application of criminal and civil law in the EEZ and limits that application to the activities in respect of which Kenya shall exercise sovereign rights in that zone, and also makes provision for the application of the Fisheries Act to the EEZ. However, the existing legislation of Kenya will be discussed below.

2.1 Limits of National Jurisdiction

Territorial Waters Act (cap. 371) of May 1972

Article 2: Breadth of the territorial waters. The breadth of the territorial waters of the Republic of Kenya shall be twelve nautical miles.

The breadth of the territorial sea shall be measured in the manner set out in the Schedule of this Act calculated in accordance with the provisions of the convention on the Territorial sea and the Continguous zone done at Geneva on 29th April 1988.

The Convention Ungwana Bay shall be deemed to be and always to have been an historic bay.

Schedule: The area of the territorial waters of the Republic of Kenya extends on the coastline adjacent to the High Seas to a line twelve international nautical miles seawards from the straight baselines, low water lines or low tide elevations.

Exclusive Economic Zone

Presidential Proclamation of 28 February 1979

Article 1: That notwithstanding any rule of law or any practice which may hitherto have been observed in relation to Kenya or the waters beyond or adjacent to the territorial sea of Kenya, the exclusive economic zone of the Republic of Kenya extend across the sea to a distance of two hundred nautical miles measured from the appropriate baseline from where the territorial sea is measured as indicated in the map annexed in the Proclamation. Without prejudice to the foregoing, the exclusive economic zone of Kenya shall:

i. in respect of its southern-territorial waters boundary with the United Republic of Tanzania be an eastern latitude north of Pemba island to start at a point obtained by the northern intersection of two arcs, one from Kenya Lighthouse at Mpunguti Ya Juu, and the other from Pemba island Lighthouse at Ras Kigomasha;

ii. in respect of its northern territorial waters boundary with Somali Republic be on eastern latitude south of Diua Damasciaca Island being latitude 1.38 degrees South.

Article 2: This Proclamation shall not affect or be in derogation of the rested rights of the Republic of Kenya over the continental shelf as defined in the continental Shelf-Act 1973.

Article 3: All States shall, subject to the applicable laws and regulations of Kenya, enjoy in the exclusive economic zone the freedom of navigation and over flight and of the laying of sub-marine cables and pipelines and other internationally lawful recognized uses of the sea related to navigation and communication.

The scope and regime of the EEZ is define in the schedule.

Schedule: The Scope and Regime of the Exclusive Economic Zone

In and throughout the zone, Kenya exercises the following:

(a) sovereign rights for the purpose of exploring, exploiting, conserving and managing the natural resources, whether renewable or non-renewable of the water column, the sea-bed and sub-soil thereof;

(b) sovereign rights with regard to other activities for the economic exploration and exploitation of the zone, such as the production of energy from the water currents, and winds;

(c) i. jurisdiction with respect to regulation control and preservation of marine environment including pollution control abatement;

ii. exclusive jurisdiction with respect to authorization and control of scientific research;

iii. exclusive jurisdiction with respect to the establishment and use of artificial island, installations, structures and other devices including customs, fiscal, health, public order and immigration regulations pertaining thereto; and

iv. other rights and duties compatible with international conventions or protocols to which Kenya is or may become party.

Kenya may permit other States or their nationals to fish in the zone on conditions and terms subject to the compliance of regulations it may prescribe. In particular these may relate to the following:

(a) Licensing of fishermen, fishing vessels and gear including payment of fees and other forms of renumeration.

(b) Conservation measures to preserve and manage the exploitation of fisheries resources including measures relating to and determining

the species which may be caught and fixing quotas per vessel over a period of time or to the catch by nationals of any State during a specified period.

(c) Regulating seasons and areas of fishing, the types, sizes and amount of gear, and numbers, sizes and types of fishing vessels that may be used in the zone.

(d) Fixing the age and size of fish and other species that may be caught.

(e) Specifying information required of fishing vessels, including catch and effort statistics and vessel position reports.

(f) Requiring under the authorization and control of Kenya, the conduct of specified fisheries research programmes and regulating the conduct of such research, including the sampling of catches, disposition of samples and reporting of associated scientific data.

(g) The placing of Kenyan observers or trainees on board such vessels.

(h) The landing of all or any part of the catch by such vessels in the ports of Kenya.

(i) Terms and conditions relating to joint ventures or other co-operative arrangements.

(j) Requirements for training personnel and transfer of fisheries technology including enhancement of Kenya's capability of undertaking fisheries research, management and development of the living resources of the zone.

(k) Measures for the enforcement of Law and regulations in accordance with this Proclamation.

These are, however, only guiding principles, which do not purport directly to regulate activities in the zone. In order to accomplish that, legislation would be required, either extending existing laws or enacting new ones for the zone. With regard both to the territorial waters and EEZ, Kenya's jurisdictional limits and general laws governing the navigational rights conform to the provisions to the United Nations Law of the Sea Convention to which Kenya is a party to.

Continental Shelf Act (cap. 312) Laws of Kenya

The Act defines the rights in respect of the Continental Shelf and natural resources as well as the application of criminal law for acts or omissions which occur within the area of the continental shelf including the application of civil law.

2.2 Legislation Relevant to Marine Pollution

2.2.1 Marine Pollution by Ships

(a) Operational Discharges by Ships

The Territorial Waters Act of 1972 governs the prohibition of pollution by the discharge of oil from ships within the territorial waters of which Kenya has sovereign rights. Powers could be exercised to deal with pollution in general.

The Merchant Shipping Act No. 35 of 1967

This Act prohibits the discharge from ships of any oil or oily mixtures within 100 miles from the coast of Kenya.

Section 308 defines:

Discharge as: any discharge, escape or leak howsoever caused;

Oil as: crude fuel oil, heavy diesel oil, coal tar and bitumen; and

Oily mixture as: a mixture containing not less than 100 parts of oil in 1,000,000 parts of the mixture.

The provision of section 309 is intended to deal with oil pollution originating from beyond the territorial waters.

Section 309 (i): If any oil or oily mixture is discharged from:

(a) any ship into a harbour or into the sea within 100 miles from the coast of Kenya; and for

(b) any Kenya ship into the sea within 100 miles of any land; the owner or master shall be guilty of an offence and liable.

Section 309 (3): Makes a person convicted of an offence under the same liable, to make good any expenses incurred by another person in removing the pollution or in remedying any damage attributable to the offence.

Section 273 (2): Deals with the absolute and strict liability in those cases where damage has occurred for reasons other than the actual fault of the owner or master and without him being privy to the Act or omissions.

Section 310: In this section the omission of dark smoke, or ash or grit by a ship, for a length of time in excess of five minutes is an offence. This may be relevant only to the extent that polluting fumes often precipitate and might end up in the marine environment or internal waters.

The Kenya Merchant Shipping Act seemed to have been influenced by the International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL) 1954, Article 1, which Kenya has ratified, in that it prohibits the discharge from ship of any oil or oily mixtures in any harbour or into sea within 100 nautical miles from the coast. Kenya has also ratified the convention as amended in 1962 and 1969 and the International Convention for the Prevention of Pollution from ships, London, 1973 (MARPOL), however, has not

ratified the 1954 Convention as amended in 1971 and the Protocol relating to the International Convention for the Prevention of Pollution from ships, London, 1978.

In view of the new legal regime of the United Nations Convention on the Law of the Sea which recognizes the coastal States exercise of jurisdiction with respect to marine pollution control within the EEZ, Kenya should consider revising these provisions to include the whole 200 nautical miles.

The Petroleum Act

In the case of this Act the ships covered by the prohibition provisions are those which carry petroleum products as cargo or ships' stores.

This Act empowers the Minister to require the installation of special equipment in ships under section 4(d).

Section 4(b): Provides that he shall determine the conditions on the subject to which petroleum may be unloaded, landed, loaded or trans-shipped. It is, however, the Petroleum Rules which make specific provisions on the special equipment which should be installed in the case of ships engaged in the conveyance of petroleum.

The Petroleum Rules, L.N. 201/1957

These Rules stipulate procedures for landing, loading and trans-shipment.

Rule 34(i): Requires the master of the ship to submit a written declaration containing the following particulars:

- the quantity of petroleum on board and the manner it is stowed or carried;
- whether any of it is class A petroleum and if so how much;
- whether any of it is class B petroleum and if so how much; and
- the quantity of petroleum (including its class) intended to be landed at the harbour

A written notice must also be made by the owner of the petroleum, which is to be loaded or discharged and once such written notice has been submitted, the authority of the Port Manager must be obtained before work commence.

Rule 36(1): Requires that when a ship is moving in the harbour, it must have one or more tugs in attendance, should this be considered desirable by the Port Manager. It also requires that during the loading or discharging petroleum, all ventilator outlets of holds, containing petroleum, shall be covered with wire gauze or provided with some other flame-proof protection.

Rule 49: Requires a petroleum ship when discharging or loading or while hatches are open to have her fire hoses connected and all fire extinguishing appliances ready for immediate use.

Rule 57: Requires that in the case of loading dangerous petroleum in bulk the escaping vapours are to be passed through the gas line which is to be carried to a point on the mast, ten feet from the masthead light.

Rule 60: Requires petroleum ships to have wire hawsers of suitable sizes, one fore and one aft, hanging to the water's edge with a shackle fitted to attach the tow rope of a tug if necessary in case of fire before commencing to load or discharge class A petroleum.

Rule 3(2): Defines class A petroleum as having a flash point below 73 OOF.

Rule 66: Requires that petroleum loaded on to a petroleum lighter be protected by tarpaulins from sparks.

The transfer of the oil within harbours or ports is carried out by means of lighters. These lighters are subject to the same rules as petroleum ships, with few exceptions.

Rule 64: Provides that a petroleum lighter shall be deemed for all purposes to be a petroleum ship present in the harbour and the owner or, in the case of a hiring, the hirer shall confirm with, and be responsible for, the observance of and shall accept the same liabilities under the rules relating to petroleum ships to the same extent as if the petroleum lighter were a petroleum ship present in the harbour of which he were a master and in relation to which he were a petroleum owner.

The transfer accordingly must be undertaken using vessel fitted with special equipment as previously mentioned in relation to ships. The exceptions, however, previously referred to, include the requirement to have a competent person aboard a ship when loading or discharging petroleum, the presence of an officer on board while the lighter is within a harbour, the need to have fire hoses and fire extinguishing facilities and that ships should have wire hawsers.

Under the Petroleum Rule, powers of inspection are exercisable by the Port Manager with a view to:

- ascertain the accuracy of any written declaration of document which a ships' master or owner submits in accordance with the provisions of the Act; and

- ascertain whether the provisions of the Rules are being observed.

However, where the offence relates to loading, landing or transshipment of petroleum, it shall be good defence for the ships owner or master if they can adduce evidence to establish that they took all reasonable measures to prevent the discharge and that the discharge was not caused by their own acts or negligence or those persons employed by them.

Section 9: When the offence relates to the failure to give notice in case of a ship carrying a cargo of oil a fine of up to two thousand shillings is imposed.

The Kenya Ports Authority Act 1972

This Act establishes the Kenya Ports Authority. The Kenya Ports Authority is responsible for all construction and management of the country's ports and operations. The provision of port facilities makes an obligation upon the Board of Directors of the Authority.

Section (i): It shall be the duty of the Board to provide by means of the undertaking of the Authority a coordinated system of ports and facilities relating thereto.

Section 8(2): The performance of the duty referred to in sub-section (i) shall include a general duty to secure that the Authority provides all reasonable facilities for handling and warehousing of cargo and other goods.

Section 9: Requires the Managing Director to establish and operate port services and facilities. This can be constructed to refer to reception facilities for oil and oily wastes as well as for other wastes discharged after clean up.

Section 37: The jurisdiction of the Kenya Ports Authority also includes the power to:

i. construct any wharf, pier, landing or any other work necessary;

ii. control the erection and use of wharves in any port or approaches to port; and

iii. construct new ports.

Requirements relating to records, which could also apply to ships carrying oil are found in Section 38

Section 38: Provides that the master of a ship produce among other things:

- the ships' register and ships' papers; and

- any other information relating to the ship and its cargo.

Section 72(1): Empowers the Minister concerned to make regulations with respect to ships while taking on or discharging ballast or cargo or while provisioning.

It may perhaps have been due to the recognition of this Act and/or other relevant law in Kenya dealing with pollution at ports, that led to the establishment of the National Anti-Marine Pollution Committee as an ad hoc inter-ministerial body to work out strategies for combating oil pollution emergencies within the territorial waters, EEZ and the proximity of Mombasa port.

Kenya having ratified the majority of the International Convention on the Prevention of Pollution of the Sea by Oil and their related Protocols, should harmonize their national legislation to the provisions of the conventions.

As mentioned previously, although Kenya has national legislation controlling the discharge of oil and oily mixtures within 100 miles of its coast, Kenya should in light of the United Nations Convention of the Law of the Sea, which stipulates that coastal States are responsible for the protection and management of the 200 mile EEZ, revise their legislation to include the remaining 100 miles.

(b) Accidental Discharge by Ships

i. The Prevention of Maritime Accidents

Kenya has no specific legislation on the prevention of Maritime accidents except for a vague provision in the Petroleum Rule, L.N. 201/1957, Rules 36(i) which requires amongst others that when a ship is moving in the harbour, it must have one or more tugs in attendance should this be considered desirable by the Port Manager.

Moreover Kenya has not ratified any of the IMO conventions on maritime safety which are the main legal instruments for the prevention of maritime accidents, namely:

- the International Convention for the Safety of Life at Sea, London (SOLAS) 1974, amended in 1978 and its Protocol, 1981 and 1983:

- the International Convention on Load Lines; (LL) 1966; and

- the International Regulations for Preventing Collisions at Sea, London, 1960 amended in 1962.

It is most important for Kenya to ratify these conventions and establish national legislation to this end. This importance is further emphasized considering that the seas off Kenya lie within the word's major maritime transport routes for crude oil.

ii. Prevention and Control of Pollution after Maritime Accidents

Kenya has no specific legislation governing the prevention and control of marine accidental pollution. Kenya should adopt regulations for the intervention in case of emergencies in its territorial sea. In establishing new legislation it would be in their interest to ratify the International Convention relating to Intervention on the Seas in Cases of Oil Pollution Casualties, Brussels 1969 and its 1973 Protocol relating to intervention on the high seas in cases of pollution by substances other than oil.

iii. Contingency Plan to Combat Accidental Pollution

Kenya at present has not national contingency plan for dealing with oil pollution of the sea or other hazardous substances. It is important and necessary since Mombasa is an important point of entry for oil

imported for the Kenyan market as well as for other further field, that they adopt an appropriate national organization and a national oil contingency plan with a view to take immediate steps in the case on an emergency This would require Kenya, if their capabilities are limited in dealing with major oil pollution spills and other hazardous substances, to be prepared to request and organize international assistance and co-operate within the framework of regional agreements, such as the Eastern African Convention, which deal in combating marine pollution in case of emergency. Kenya should therefore ratify the Eastern African Action Plan and its protocols.

Although Kenya has no national oil spill contingency plan per se the Kenya National Anti-Pollution Committee works on strategies for combating marine pollution incidents within the Mombasa harbour area, the territorial waters and the EEZ. Within the strategies of the Committee there are two main action plans, the Kilindini Oil Spill Contingency Plan which deals with the two areas most vulnerable to oil spills e.g. the Kipevu Oil Terminal and the Shimanzi Oil Terminal, other areas of the harbour are also taken into account, and the Kenya Coast Oil Spill Contingency Plan, which deals with three levels of pollution:

i. chronic pollution - mainly of tarry lumps on beaches;

ii. small spills - spills up to 50 tonnes of oil; and

iii. large spills - spills over 50 tonnes of oil.

iv. <u>The Liability and Compensation for Pollution Damage</u>

Kenya has some legislation on the liability and compensation in the event of pollution damage. Section 273(2) of the Merchant Shipping Act deals with the absolute and strict liability in cases where damage has occurred for reasons other than the fault of the owner or master and without him being privy to the Act or omissions. Section 309 deals with the discharge of oil or oily mixture from ships within 100 miles from the coast and makes a person convicted of an offence liable to make good any expenses incurred by another person in removing the pollution or in remedying any damage attributed to the offence.

Under section 3(1) of the Oil Production Act the licensee is liable for any damage or injury to the property and rights and is required to pay compensation for such damage.

All the same it is important for Kenya to protect its coast and natural resources from pollution from beyond its legislative jurisdiction of 100 nautical miles. It is therefore in the interest of the Kenya Government to ratify the international conventions related to oil pollution damage liability and compensation namely the:

- International Convention on Civil Liability for Oil Pollution Damage, Brussels, 1969;

- Protocol of 1984 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969;

- International Convention on the Establishment of International Fund for Compensation for Oil Pollution Damage, 1971;

- Protocol of 1984 to amend the International Conventions for the establishment of an International Fund for Compensation for Oil Pollution Damage, 1971; and

- International Convention Relating to the Limitation of the Liability for Maritime Claims, London, 1976.

2.2.2 Pollution Resulting from Exploration/Exploitation of the Sea-bed Minerals

In as far as the exploration and exploitation of mineral resources is concerned, the main resources in Kenya which considered the marine environment are the oil resources, because work has already started on them.

The Oil Production Act of 1962

Section 3 (i): Extends its application to all land situated within Kenya, including that part of the sea-bed off the coasts of Kenya and the sub-soil thereunder.

Oil exploration is undertaken in accordance with the terms of a licence given which include amongst others the licensee to prevent the escape of petroleum into any reservoir, estuary or harbour. The licensee is also obligated to drain waste oil, salt water and refuse in a manner approved by the Commissioner of Mines and Geology.

In the case of oil production activities the licensee is required to:

- control the flow and to prevent the escape or wastes of petroleum discovered in, or obtained from, the area in question;

- conserve the land for productive operations; and

- prevent the escape of petroleum into any estuary or harbour.

The licensee is also required to use methods and practices in confining oil which is customarily used in good oil field practice to avoid any harm or pollution. When the licensee intends to abandon a well, he must ensure that it is properly plugged so as to prevent the ingress and egress of oil in and from the strata or portion of the strata which has been bored through. The licensee is also liable for any damage or injury to the property and rights of any third party and in such cases is required to pay compensation for such damage.

The Kenya Mining Act of 1972

This Act excludes mineral oil from its scope, and vests minerals in the Government.

Section 6: Requires a licence for prospecting for non-oil minerals in any land in Kenya.

A mining operation can only be undertaken in accordance with the terms and conditions of a licence issued by the Commissioner. The mining rights exercised in relation to a location duly registered by the Commissioner may be forfeited where the holder of the location fails to comply with the provisions of the Mining Act

The holder of a location can apply for a lease which if granted, gives him the right to enter the land covered by the lease and mine and remove the minerals concerned. The mining operations must be carried out in accordance with the provisions of the Mining (Safety) Regulations L.N. 275 of 1960, which from a point of view of preventing marine pollution require that:

- mercury. cyanide and any other poisonous substances used, be stored in compartments specifically set aside for that purpose;

- no water containing any poisonous or injurious substances be permitted to escape into any body of water it has been rendered innocuous.

The Commissioner of Mines and Geology or an inspector is empowered to enter any mine or visit any operational area to ensure that the provisions of the Act are complied with. When a mine is abandoned, it is required that the area be securely fenced, excavations be filled in and boreholes if any be plugged. The Minister is also empowered to make regulations relating to the disposal of poisonous or noxious products resulting from mining operations, and the defiling or wasting of water wherever situated and wherever obtained.

The Mineral Oil Act of 1972

This Act rests all mineral oils existing in its natural condition under any land in Kenya in the Government.

The existing national laws relating to oil mining in Kenya has scanty provisions on the question of preservation of the environment. The emphasis is mainly on government control of the production from an economic point of view.

Kenya has ratified the Convention on the Continental Shelf, Geneva, 1958, however, she should adopt national legislation to this end.

2.2.3 Marine Pollution by Dumping of Wastes and Other Matter

Specific legislation on this subject matter does not exist. It would be in the interest of the Kenyan Government to ratify the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, the London Dumping Convention (LDC) 1972. The Convention regulates the deliberate disposal at sea of wastes from vessels, aircrafts or other man made structures at sea, excluding operational discharges. More specifically the Convention defines three categories of wastes:

- wastes, the dumping of which is prohibited;

- wastes, the dumping of which requires a prior special permit; and
- all other wastes, the dumping of which requires a prior general permit.

In ratifying this Convention the Kenyan Government must establish national regulations in this field.

2.2.4 Marine Pollution from Land-Based Sources

There is little comprehensive legislation to prevent, reduce and control pollution of the marine environment from land-based sources in Kenya. Land-based sources of pollution are defined as pollution of the maritime areas by direct or indirect discharges on the sea, of industrial, domestic wastes, pesticides and soil which come to the sea through rivers. A few provisions, however, do exist that address this problem.

The Water Act of 1952

Under this Act the Water Apportionment Board has established effluent standards in relation to most industries. These standards are incorporated as terms of the permit to use water for an industrial activity in that failure to comply with such standards may result in the forfeiture of the permit. The Act also deals with wastes being discharged into a body of water.

The Public Health Act

Section 118: Defines what constitutes "nuisances" which are dealt with in a number of ways. The "nuisances" are defined as:

i. any factory which is not so ventilated as to destroy or render harmless and inoffensive any gases, vapours, dust or other impurities it generates; and

ii. any chimney discharging smoke in such quantity or in such a manner as to be offensive or injurious or dangerous to health.

This encompasses situations where substances, whether effluents or wastes may be discharged into a body of water.

Section 129: Imposes a statutory obligation on local authorities to protect water supplies in their area of jurisdiction against pollution.

The Ministry can act on its own under Section 118 or by requiring a local authority to take remedial measures.

Factories Act

This Acts provisions, relating to remedial measures in industrial activities discharging dust or fumes or gaseous substance have been

promulgated with a view to protecting the life and health of the workers, however, the wider environmental considerations are inadequately catered for.

Agriculture Act of 1967

This Act deals amongst others with the problems of soil erosion and empowers the Minister to take measures including:

i. the planting of trees;

ii. the regulation of livestock; and

iii. the regulation of cultivation and the determination of farming practices including the employment of terraces, construction of gabions, etc.

The Minister is also empowered to issue Land Development Orders to ensure that the owners of land, undertake specific development activities designed to avoid soil erosion as well as arrest that erosion which is already taking place. This Act is important in that it indirectly deals with the large deposit of sediments onto the off lying coastal reefs through the discharge of rivers. At present Kenya's coral reefs are being smoothered by sediments due to inland soil erosion.

2.3 Legislation Relevant to Coastal Areas Management and Development

Legislation and regulations relating to the development and management of coastal areas are scanty. In respect to coastal tourism development, the physical development aspect would normally be covered by laws which have been discussed. There is no legislation as yet which responds to the aesthetic and social aspects of tourism development and the impact it might have on the coastal and marine environment. Nevertheless the following provision exist.

The Land Planning Act of 1970

Under this Act, a person proposing to undertake change in the use of land is required to apply for the consent of the planning authority. However, no specific environmental considerations are included in an application for consent from the planning authority. It is likely, however, that such consideration will in practice be considered.

2.4 Legislation Relevant to Marine Living Resources

2.4.1 Fisheries Legislation

At present a new Bill is being submitted to parliament, The Fisheries Bill of 1989. The principal objective of this Bill is to provide for a new composite legislation on fisheries to replace the existing fisheries

legislation. The new legislation will provide for stricter control of foreign fishing vessels operating in Kenya fishery waters. The Bill also provides for regulation of fishing in the extended Kenya fishery waters following the declaration of a 200 mile EEZ. The Bill makes provisions for the licensing and registration of fishing vessels, and empowers the Minister to regulate other fishing activities through the licensing system as well as provides for offences and enforcement of the Act and regulations to be made thereunder. To promote fisheries by local entrepreneurs the Bill also provides for the establishment of a scheme of loans to fishermen. However, the existing legislation of Kenya will be discussed below:

Crown Fisheries Act.

Article 2: Authorization necessary for certain fishing. L.N. 210/1957, L.N. 172/1960. It is unlawful for any person, unless authorized by the Minister, to take, acquire, win, carry away or export:

i. pearls, pearl or mother-of-pearl shells, or shellfish containing or believed to contain pearlys or mother-of-pearl;

ii. bêche-de-mer (for commercial purposes); and

iii. ambergris;

in or from the fisheries, or from any shore or banks in or about Kenya or the territorial waters thereof.

Article 3: Pearls, etc., to be mature. A person so authorized in respect of pearls or mother-of-pearl shall not acquire, win, carry away or export pearl or mother-of-pearl shells or shellfish except those which have attained maturity, and are of a diameter of four-and-a-half inches or more.

Article 4: Ambergris to be surrendered. Any person who discovers any ambergris shall forthwith deliver the same to the nearest regional Government officer.

Article 5: Concealment of an offence. Any person who conceals or is privy to the concealment of any ambergris, or buys, sells or otherwise deals in any ambergris which has not been delivered to a Government officer, shall be guilty of an offence.

Article 6: Power to make rules for sale of amergris. CN. 1681/1955, L.N. 173/1960. The Minister may by rules prohibit the sale of amergris except by licenced persons, and may regulate the sale by those persons, and any breach of rules made shall be an offence.

Fish Industry Act of 1968 (amended)

Article 2: A person shall be deemed to engage in the fish industry if he carries on the business of catching or landing fish, or if he carried on in Kenya the business of the cultivation of fish or of the selling of fish or fish products by wholesale or by retail or of processing fish.

Article 3: For the purpose of reorganizing, developing and regulating the fish industry, the Minister shall have power to do all or any of the following things:

i. to carry on research and experiment, either along or in collaboration with others, and for that purpose provide or acquire, equip and operate vessels or plants, and give financial assistance to others carrying on research or experiment;

ii. to encourage persons engaged in the fish industry to make voluntary arrangements on a cooperative basis for the selling of fish or the buying of equipment, supplies and other requisites for the industry (including in particular gear, fuel and stores for fishing vessels), and to give financial or other assistance in bringing any such arrangements into operation;

iii. to promote the export of fish by establishing or by encouraging, and giving financial or other assistance in the establishment of, selling agencies and storage facilities outside Kenya and by other means;

iv. to provide or acquire and equip fishing vessels to be operated under charter from the Government;

v. to provide or acquire, equip or operate, either alone or in collaboration with others, plant for processing fish in Kenya in any locality in which the Minister thinks it necessary, so as to secure proper provision for the needs of the fishing industry; and

vi. to encourage, by means of publicity, advice and instructions, the improvement of conditions in the fish industry and the greater consumption of fish.

Article 4: The Minister may, if he thinks it expedient to do so, by notice in the Gazette establish one or more advisory councils to advise him on matters relating to the fish industry or any section thereof, either for the whole of Kenya or for a part thereof.

An advisory council shall consist of not more than seven persons appointed by the Minister to represent such sections of the fish industry as he considers appropriate.

The Minister may make rules for regulating the procedure of advisory councils, and subject to any such rules an advisory council may regulate its own procedure.

Article 5: For the purpose of promoting modern fishing methods, the Minister may prepare a scheme, with the approval of the Treasury, providing for financial assistance by way of loans to fishermen in respect of expenditure incurred in the acquisition of fishing vessels or their gear, fishing nets and other equipment, and may provide financial assistance, in accordance with the scheme upon the conditions contained in the scheme.

Article 6: The Minister may, with the consent of the Treasury:

i. make to an advisory council or loans committee such grants as may be necessary to enable it to discharge its functions under this Act;

ii. pay to the members of an advisory council or loans committee (other than a member who is a public officer in receipt of a salary) such remuneration and travelling and other allowances as he may, with the approval of the Treasury, determine; and

iii. make such other payments as may be necessary to give effect to the provisions of this Act.

Article 7: The Minister may make regulations for the reorganization, development and regulation of the fish industry, and for the protection of fish and the prevention of over-fishing, and, without prejudice to the generality of the foregoing, for all or any of the following purposes:

i. for regulating the manner in which any fish shall be caught, propagated or cultivated, for determining the times and seasons at which the catching of any fish shall begin and cease, and for protecting fish from any infection or disease;

ii. for requiring fishing vessels and their gear to be registered, for regulating the construction and equipping of fishing vessels and for prescribing the form and construction of fishing nets, fishing gear and other equipment used in fishing;

iii. for regulating the handling and storage of fish or registered fishing vessels, for prescribing the places and times for the landing of fish and for regulating the handling of fish during or at any time after landing;

iv. for timing landings of fish so as to secure regularity in the supply and prevent congestion in harbours and landing places, and for that purpose for requiring fishing vessels to land or delay landing their catch;

v. for regulating and directing the marketing, distribution, transportation, delivery, purchase or sale of fish or fish products, including the prescribing of specified markets and the organization of schemes for the allocation of markets or areas of operation to particular persons or classes of persons;

vi. for prescribing the prices and grades, and the methods of analysis and testing of any fish or fish product;

vii. for regulating and controlling the processing of fish and prescribing the standards of quality for fish and fish products and limiting the purposes for which fish and fish products of prescribed standards may be used;

viii. for providing the protection of any fish or fish product against contamination or infection, including prescribing standards and methods in relation to the processing, storage, packaging and treatment of fish and fish products;

ix. for prescribing the receptacles, canning, lables marking and descriptions for sale which may be used in relation to fish or fish products;

x. for requiring the registration of persons distributing or retailing fish or fish products and of any premises used for distribution or retailing;

xi. for prescribing the accounts and records to be kept, and the information to be furnished, by producers, manufacturers, distributors or retailers of fish or fish products in relation to their business and such; and

xii. for regulating and controlling the taking or collection of corals and shells and other like fish products.

Article 8: Regulations made under section 7 of this Act may:

i. make different provisions with respect to different cases or classes of case, with respect to different areas, seasons or circumstances, with respect to different kinds of fish (whether freshwater fish or sea fish), and with respect to persons who are and persons who are not citizens of Kenya, and may impose or provide for the imposition of conditions and restrictions and make or provide for the making of exceptions;

ii. provide for the issue of licences upon or without conditions, and provide for the issue of a licence vesting in any person or persons, to the exclusion of all other persons, a right in respect of any matter referred to in section 7 of this Act in connexion with the catching or cultivating of any fish or the selling, purchasing, distributing, marketing and processing of any fish or fish product; and any such licence may relate to the whole of Kenya or any part thereof;

iii. impose fees or charges for any licence, authority or registration issued or made, or any service performed or other things done, under this Act or under the regulations;

iv. prescribe the particulars, information, proof or evidence to be furnished as to any question or matter arising under this Act or under the regulations;

v. prescribe, in respect of any action required or permitted to be taken under this Act or under the regulations, the time and manner of taking that action, the procedure to be followed and the forms to be used;

vi. impose, for breach of the regulations, a penalty not exceeding a fine of ten thousand shillings or imprisonment for a term not exceeding one year, or both such fine and such imprisonment;

vii. impose on any person accused of an offence under the regulations the burden or proving particular facts (but not impose on any accused person any general burden of proving his innocence); and

viii. contain such incidental or supplementary provisions as appear to the Minister to be expedient for the purposes of the regulations.

Article 9: (1) Without prejudice to any regulations made under this Act, no person shall catch or assist in catching fish in territorial waters otherwise than under and this Act and for the time being in force:

Provided that this sub-section shall not apply to:

i. a person employed by a licensee, or to a director of a company which is a licensee, in respect of any act done by him in the course of his employment or directorship, as the case may be though without prejudice to section 23 of the Penal Code; or

ii. a person catching fish for the consumption of himself or his family alone.

(2) Any person who contravenes subsection (1) of this section shall be guilty of an offence and liable to a fine not exceeding twenty thousand shillings or to imprisonment for a term not exceeding two years, or to both such fine and such imprisonment.

Article 10: Any person who receives any fish or fish product knowing or having reason to believe that an offence under this Act or any regulations made thereunder has been committed in respect thereof shall be guilty of an offence and liable to a fine not exceeding five thousand shillings or to imprisonment for a term not exceeding six months, or to both such fine and such imprisonment.

Article 11: On convicting a person for an offence under this Act or any regulations made thereunder, the court may, in addition to any penalty otherwise imposed, order any fishing gear used in connexion with the offence, or any fish or fish product in respect of which the offence was committed, to be forfeited or, where the fishing gear, fish or fish product has been disposed of otherwise than under section 12 of this Act so that it is not available for forfeiture, that the convicted person pay to the Government a sum of money not exceeding the value of that fishing gear, fish or fish product:

Provided that no fishing gear, fish or fish product shall be so forfeited, and no such payment in respect thereof shall be ordered, if the

owner thereof satisfied the court that the offence was committed without his consent or connivance and that he exercised all due diligence to prevent its commission.

Article 12: (1) An authorized officer shall have power without warrant to go on board any vessel within territorial waters or any registered fishing vessel outside territorial waters, or enter any premises which are not used only as a private dwelling house or board any vehicle where he has reasonable grounds for suspecting that fish or fish products are being kept, processed or carried for the purpose of ascertaining whether there is or has been on or in connexion with the vessel, premises or vehicle any contravention of this Act or of any regulations made thereunder and amongst others:

i. to carry out an inspection of the vessel, premises or vehicle and to take such samples and carry out such tests as he may reasonably require;

ii. to require any person in occupation of the premises or any agent or servant of any such person, or any person in charge of the vessel or vehicle, to furnish all such information, to produce for inspection all such books, accounts and other documents and to furnish all such means of inspection as he may reasonably require for the purpose aforesaid;

iii. to seize or take copies of any books, accounts or documents which he has reasonable grounds for suspecting to afford evidence of an offence under this Act or any regulations made thereunder; and

iv. to seize or detain any fish, fish product, fishing gear, vessel vehicle or other article which he as reasonable grounds for suspecting to afford evidence of an offence under this Act or any regulations made thereunder, and to remove, or order any person in charge thereof to remove, the same to such place of security as he may determine.

REGULATIONS

Fish Protection (Registration of Fishing Craft, Sea Fisheries) Rules (Cap. 378) (as amended)

Article 1: These Rules may be cited as the Fish Protection (Registration of Fishing Craft, Sea Fisheries) Rules, and shall apply to the whole of Kenya and the territorial waters (excluding inland waters).

Article 3: Every fisheries officer shall maintain a register of boats registered by him under these Rules in the form of duplicates of each certificate of registration issued by him hereunder; each District Commissioner to whom an application for registration is made shall upon the first approved application made to him hereunder likewise maintain such a register.

Any cancellation of a registration and any approved change of ownership shall be noted by endorsement upon the relevant duplicate certificate in the register.

Article 4: No person shall use for fishing any boat the owner or which engages in fishing wholly or partially for a livelihood, unless such boat is for the time being registered with a fisheries officer or a District Commissioner in accordance with the provisions of these Rules.

Article 5: (1) Upon the registration of a boat, the fisheries officer or District Commissioner shall allot letters and a distinctive number or numbers (hereinafter called the identification marks) to the boat, and shall issue to the owner of such a boat a certificate of registration in Form A in the First Schedule to these Rules.

(2) Subject to the provisions of these Rules, registration shall remain effective until the 31st December next after the date of registration, and immediately thereafter application for re-registration shall be made; every re-registration shall expire on the 31st December next after application therefor.

Article 6: Immediately upon registration of a boat, the owner thereof shall cause the identification marks to be clearly painted in Latin characters in black on a light background or white on a dark background on both sides of the bows of the boat; each letter and figure shall be at least nine inches in height, and the painted storkes thereof shall be at least one and a half inches in breadth.

Article 8: Any fisheries officer or District Commissioner may, if he considers it in the interests of the conservation of fish so to do, refuse to register any boat or change of ownership as aforesaid or cancel the registration of any boat, provided that any person aggrieved may appeal against such refusal or cancellation to the Civil Secretary of the Coast Region whose decision shall be final.

Article 10: The owner or any other person for the time being in possession or in charge of any boat shall, if called upon to do so by a fisheries officer, and administrative officer, a customs officer of a rank not below that of junior examining officer or preventive officer, a police officer of a rank not below that of sub-inspector or any person duly authorized in writing by a fisheries officer, produce the certificate or certified copy certificate of registration of the boat.

Article 13: Any person who contravenes the provisions of any of rules 4, 6, 7 and 10 of these Rules shall be guilty of an offence and liable to a fine not exceeding one thousand shillings, or in default of payment to imprisonment for a period not exceeding three months.

Fish Protection (Oysters) Rules (Cap. 378) (as amended)

Article 3: (1) Subject to the provisions of paragraph (4) of this rule, no person shall fish for any oyster otherwise than for his own consumption unless he is in possession of a valid licence to do so.

(2) Every application for a licence shall be made in writing to the Chief Game Warden, who may in his absolute discretion grant or refuse the same.

(3) Every licence shall:

- be in the form set out in the First Schedule to these Rules;

- subject to the provisions of paragraph (3) of rule 4 of these Rules, be valid for one year from the date of issue thereof; and

- subject to the provisions of paragraph (3) of rule 4 of these Rules, permit the licensee to fish for oysters in unlimited quantities within the area of areas specified therein.

(4) Any licence may permit, in addition to the licensee, the servants, agents or employees of such licensee, to a maximum number to be specified therein, to fish for oysters pursuant to such licence.

Provided that, on every occasion when any such licensee is not present at and supervising such fishing, every such servant, agent or employee shall be in possession of an authority in writing, containing his name and that of the licensee and the number of the licence, correctly dated and signed by the licensee, and such authority shall be produced upon demand to any of the persons specified in section 8 of the Ordinance.

(5) Every licensee shall produce his licence whenever required to do so by any of the persons specified in section 8 of this Ordinance.

(6) There shall be payable for every licence the fee specified in the Second Schedule to these Rules.

Article 4: (1) The area or areas to be included in any licence shall, before the issue thereof, be demarcated on the ground by the Fisheries Officer or by some person duly authorized by him, in the presence of the person applying for such licence or some other person duly authorized by him in writing in that behalf.

(2) The costs and expenses of any demarcation under paragraph (1) of this rule shall be assessed by the Chief Game Warden, and the amount thereof shall before the issue of any licence be paid to him by the person applying thereof.

(3) If in the opinion of the Fisheries Officer the operations of any licensee becomes, or may be likely to become, during the currency of any licence, detrimental to the survival of oysters in any area or areas specified in such licence or in any adjacent or neighbouring area or areas, the Fisheries Officer may in his absolute discretion, by notice in writing to the licensee, forthwith cancel such licence, or amend the same by deletion therefrom of any area or areas or any part or parts of any area or areas included therein.

Article 5: (1) Any person who commits any breach of these Rules or fails to comply with any provisions thereof or of any licence thereunder shall be guilty of an offence.

(2) In any case where any person is convicted of any offence under paragraph (1) of this rule, the Fisheries Officers may, if such person is either:

(a) a licensee; or

(b) a servant, agent or employee of any licensee having the authority provided for by paragraph (4) of rule 3 of these Rules.

forthwith cancel the licence of such licensee.

Article 6: Any person who is aggrieved by anything done by the Fisheries Officer pursuant to these Rule may, within thirty days of the notification thereof by the Fisheries Officer, appeal in writing to the Provincial Commissioner of the Coast Province, whose decision will be final.

The Fish Protection (Movement of Fish) Rules of 1953

Rule 2: No person shall, except with the prior permission in writing of the Chief Fisheries Officer, place in any body of water any live fish of any species whatsoever, unless such fish has been captured in and removed from such body of water.

The Fish Protection (Processing of Fish) Rules of 1964

Rule 3: Any person who, without being in lawful possession of a valid permit, engages in the processing of fish by any means whatsoever, shall be guilty of an offence:

Provided that this rule shall not apply:

i. to the placing, storage or transport of fish in ice (but by no other means) as a means of preservation;

ii. to the process of smoking or sun-drying of fish, whether filleted or not, unless this is to be carried out on a scale involving the use of electrically powered or motorized plant machinery;

iii. to hotels, eating-house or restaurants, who freeze fish as a means of preservation for consumption by their patrons;

iv. to employers who freeze fish as a means of preservation for consumption by their employees; or

v. to an individual processing fish for consumption by himself or his family.

Rule 4: Upon the application in writing of any person, the Minister may in his discretion grant a permit to process fish, on payment of such fees and subject to such conditions as the Minister thinks fit, provided that such a permit shall be additional to any permission which may be required under any other written law, before application is made for such permission.

Rule 5. Any person holding a permit who contravenes any of the conditions imposed in the permit, shall be guilty of an offence

Rule 6 A person holding a permit shall on demand produce his permit to any fisheries officer, game warden, administrative officer or police officer, or to any person authorized by the Minister in writing

Rule 7. (1) Any person who is guilty of an offence under these Rules shall be liable

(2) In addition to any penalty awarded by a court, the Minister may, in discretion terminate a permit before its due date of expiry upon conviction of the permit holder or employee for an offence under these Rules

The Fish Protection (Malindi Wholesale Fish Market) Rules of 1963

Rule 1. These Rules shall apply to that portion of the coastline of Kenya bounded to the north by Ras Ngomeni, in the Kilifi District and to the south to a point two miles south of the village of Watamu in Kilifi District

Rule 3. The first sale of all Fish landed on the coast between the point mentioned in Rule 1 of these Rules shall be by public auction in the Wholesale Fish Market at Malindi, under the Malindi Township (Wholesale Fish Market) Rules, 1962

Provided that nothing in this rule shall apply to fish sold to a person for his own consumption not being bought for resale.

Any person who contravenes this rule shall be guilty of an offence

Rule 4. These Rules apply to fish landed in whatever form, whether fresh, frozen, chilled, dried or salted

Rule 5. Any person who is guilty of an offence under these Rules shall be liable

The Fish Protection (Fishing by Non-Kenyan Citizens) Rules of 1964

Rule 1. These Rules shall apply to the whole of Kenya including the Territorial Waters

Rule 3. Any person who is not a citizen of Kenya and who, without being in possession of a valid permit, fishes for, takes or kills any species of fish in any water within Kenya, shall be guilty of an offence.

Provided that this rule shall not apply, amongst others, to:

i any person who is in possession of a trout licence and is fishing solely for trout,

ii any person fishing for trout who is fishing any waters with one fishing rod in his hand, to which rod is attached a single line with one or more hooks or lures fastened thereto; or

iii any person who is fishing on a privately owned dam or fish pond in respect of which he is owner or lawful lessor of such dam or fish pond, or

iv in the case of Lake Naivasha, any person who possesses riparian fishing rights as provided for in the Fish Protection (Lake Naivasha) Rules

Rule 4: Any person who is not a citizen of Kenya and who, without being in possession of a valid permit, engages in the purchase, sale, barter or marketing of fish shall be guilty of an offence:

Provided that this rule shall not apply in case of:

i. hotels, eating-houses or restaurants purchasing fish for the consumption of their employees; or

ii employers purchasing fish for the consumption of their employees; or

iii an individual purchasing fish for consumption by himself and his family

Rules 5. Upon the application in writing of any person who is not a citizen of Kenya, the Chief Fisheries Officer may in his discretion grant a permit to fish for, capture or kill any species of fish, upon payment of such fees and subject to such conditions as the Chief Fisheries Officer thinks fit:

Provided that such a permit shall be additional to any permission which may be required under any other written law, and must be obtained before application is made for such permission

Rule 6. Upon the application in writing of any person who is not a citizen of Kenya, the Chief Fisheries Officer may in his discretion grant a permit to purchase, sell, barter or market any species of fish, upon payment of such fees and subject to such conditions as the Chief Fisheries Officer thinks fit

Provided that such a permit shall be additional to any permission which may be required under any other written law, and must be obtained before application is made for such permission

Rule 7. No permit shall be issued for a period exceeding one year, but may at the discretion of the Chief Fisheries Officer, be renewed for successive periods of one year

Rule 8: Any person holding a permit who contravenes any of the conditions imposed in the permit, shall be guilty of an offence.

Rule 9: A person holding a permit shall on demand produce it to any fisheries officer, game warden, administrative officer or police officer or to any person authorized by the Chief Fisheries Officer in writing.

Rule 10: Any person who is guilty of an offence under these Rules shall be liable.

In addition to any penalty awarded by a court, the Chief Fisheries Officer may, in his discretion, terminate a permit before its due date of expiry upon conviction of the permit holder or his employee for an offence under these Rules.

The Fish Protection (Crustacea) Rules of 1966

Rule 2: In these Rules, except where the context otherwise requires, "crustacea" includes all species of shrimps, prawns, lobsters, crawfish and crabs, including the brood, spawn, ova and young thereof.

Rule 3: Any person who delivers, sells, purchases, disposes of, markets, or processes crustacea otherwise than under and in accordance with the terms of a licence issued to him by the Minister shall be guilty of an offence and liable.

Rule 4: Nothing in these Rules shall apply to:

i. any person who purchases crustacea, not exceeding five pounds weight in quantity, from a fisherman for his own immediate consumption;

ii. any person who purchases any quantity of crustacea from a person issued with a licence for the purpose of resale to the public;

iii. any employee of a person issued with a licence whilst acting in the course of such employment or any agent of any such person acting for and on behalf of such person.

The Government Fisheries Protection Act

This Act requires ministerial authorization to gather pearls and related shells, bêche-de-mer (for commercial purposes) and ambergris. Bêche-de-mer authorizations are granted on the basis of tenders, which are judged according to both the payment offered and the qualifications of the tenderers, i.e the willingness and ability to provide data.

Marine Mammals

The Seal Fisheries (Crown Colonies and Protectorates Order in Council, 1913) (Group 20) and the Whaling Industry (Regulation) Act (Newfoundland, Colonies, Protectorates and Mandated Territories) Order, 1936 (Group 21) extends British whaling and sealing legislation to Kenya. Although they are not repealed, they have limited practical significance.

Although the existing fisheries legislation makes provisions for the comprehensive management utilization and protection of the living resources it, however, does not provide specific regulations for the management of the fishery resources with respect to allowable catch, closed seasons, prohibited exploitation methods or deal with the licencing of foreign fishing vessels and joint venture agreements Specific regulations must be incorporated within the existing legal framework, comprehensive protection and control of these living resources to ensure maximum utilization

2 4 2 Endangered Species

Kenya has ratified the African Convention on the Conservation of Nature and Natural Resources, Algiers, 1968, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington, 1973

The Wildlife (Conservation and Management) Act provides generally for national parks and reserves, however, makes no distinct provision for marine parks and reserves Nevertheless, Malindi Marine National Reserve, Malindi Marine Park the Watamu Reserve and Park and the Kisite Park and adjacent Mpunguti Reserve have all been established under the Act Fishing is generally prohibited in a marine national park (section 13) Except where the Minister has determined otherwise, the same prohibition should apply to marine reserves (section 19), but in practice only spear fishing and shell and coral collection are prohibited.

Under section 2 2 2 Schedule 3 of the Wildlife Act the hunting of dugong, green marine turtles and hawksbill turtles is also prohibited

Although Kenya did not become a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora until 1979, the 1973 convention had considerable influence on the provisions o the Wildlife (Conservation and Management) Act The Wildlife (Conservation and Management) Act contains clear provisions on all aspects of the 1973 convention such as the export of trophies, importation of trophies generally and that of ivory and rhinoceros horn, and the licencing of the export of trophies and their derivatives, the role of customs authorities at the point of entry and exit for such trophies and derivates, of the species which appear in Appendices I and II The first Appendix incorporates those wildlife species which face the danger of extinction and therefore require maximum protection The export of trophies and/or derivatives require a licence issued by the relevant authority whilst importing such an item requires a licence issued by the relevant authority from the country of origin

Kenya having reflected the provisions of the 1973 convention in its Wildlife (Conservation and Management) Act has attempted to harmonize its national legislation to that of the convention to lead to its enhancement and success. The success of any international convention depends on the harmony of the legislation of Member States Kenya's legislation on the protection of endangered species is fairly comprehensive Emphasis should now be directed to enforcement

Furthermore Kenya should ratify the Eastern Action Plan and its Protocols. The Protocol concerning Protected Areas Wild Fauna and Flora in the Eastern African Region specify that contracting parties shall take

all appropriate measures to ensure the protection of wild fauna species listed in annexes of the Protocol. It would also be in the interest of the Kenya Government to ratify the Convention on the Conservation of Migratory Species of Wild Animals. Bonn, 1979.

2 4 3 Protected Areas and Reserves

Kenya has no specific regulation relating to marine and coastal protected areas. Nevertheless Kenya has some basic regulations.

Under Sections 15 (1) of the Wildlife (Conservation and Management) Act nature protection areas may be established where the Minister is satisfied that it is necessary, for ensuring the security of the animal or vegetable life or for preserving the habitat and ecology of such an area. The Minister may also specify the acts which are prohibited, restricted or regulated.

Marine parks which have been established have been done so under section 6 (1) which empowers the Minister to establish national parks generally.

Kenya should adopt more specific national legislation concerning marine and coastal protected areas.

Summary

In so far as the existing legislation application to marine living resources is concerned, the Fish Industry Act has a number of disadvantages. In particular is its failure to structure the delegation of the rule-making power which is its core provision. The establishment of marine fisheries regulations is limited and the Act does not help in suggesting where to begin and what criteria to use. Partly as a result, general marine fishery management measures have not been prescribed, even though there is a great need for them. Moreover the existing legislation lacks a management orientated licencing system. Licencing is an important tool in controlling fishing efforts and in obtaining management information. The existing legislation does stipulate that a licence is required to fish, however, it fails to indicate the purpose of licencing or suggest any criteria for the issue of a licence. Current licences are in terms of persons, whereas a more significant tool for fisheries management is ordinarily the vessel. It is easier to regulate the number and kind of vessels than fishermen. Furthermore regulating vessels more accurately indicate fishing intensity. Nevertheless the licencing provision requires implementing regulation. Regulations at present have only been issued for special products and non-Kenyan citizens, of which the regulations in the latter case specify no licencing criteria.

Perhaps it may also be advantageous if the definition of the law with respect to management measures were better defined to provide the responsibility to the Director of Fisheries, who is better placed to formulate them once the basic policy has been established rather than to the Minister. However, at present the most pressing need is for the establishment of basic regulations of the local marine Fishery as well as regulations for foreign fishing vessels.

With respect to the 12 mile zone the Fish Industry Act would need to be modified to extend its application to all waters under Kenyan fisheries jurisdiction

Legislation and regulations should also be established on coastal areas management and development. Existing legislation which is very limited only deals with the physical development aspect with no legislation dealing with the aesthetic social aspect of development and the impact it might have on the coastal and marine environment

With regards to endangered species, Kenya's legislation is comprehensive, however, there is a need for specific legislation on marine protected areas and reserves, which indirectly will effect the latter Although at present, wildlife management has been oriented towards maintaining instruments of policy to police and enforce prohibitions, there is also a need for scientific management which should encompass the dynamics of the ecosystem as a whole

Legislation with regards to the exploration and exploitation of non-living resources is limited in respect to specific regulations on the protection and conservation of the marine environment as well as the control and prevention of pollution from such operations Kenya also needs to adopt specific legislation and ratify the appropriate international conventions on all aspects of marine pollution namely the prevention and control of pollution after maritime accidents, marine pollution by ships, marine pollution by dumping of wastes and other matter, and liability and compensation for pollution damage as well as establish a national contingency plan in the event of maritime pollution to include the port areas as well as the territorial waters and the EEZ Comprehensive legislation must also be established on marine pollution from land based sources

An integrated maritime policy needs to be drawn up which would fit in with the existing national policy

Institutions and ministries dealing with the marine environment must co operate and coordinate their activities more efficiently in line with an agreed policy Often is the case that each institution pursues what it perceives to be the best policy from the department point of view, which creates a situation of institutional paralysis or conflict

Although Kenya has established a National Environment Secretariat whose soul purpose is to formulate policy and recommendations for environmental management, its main short coming is that it has no legislative basis to enforce its recommendations The Secretariat at present, lacking such enabling legislation has to proceed by requesting other government agencies to take action when its own directives have not been heeded

SOMALIA

1. EXISTING MACHINERY FOR THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT

The various ministries and autonomous agencies which are involved in the protection and management of the marine resources and coastal environment are described below.

1.1 Office of the President

The Office of the President through the National Economic Commission keeps an eye on the economic and administrative aspects of agriculture, industry, livestock, marine resources and rural development and monitors all plans and activities relating to these sectors as established by the Ministry of Planning.

The State Attorney in co-operation with the Ministry of Foreign Affairs and the Ministry concerned deal with international agreements. The State Attorney proposes international conventions for ratification to the Council of Ministers.

1.2 Ministry of Marine Transport and Ports

This Ministry was established by Law No. 12 of 3 February, 1977. The main objective of the Ministry is to develop maritime transport and improve port facilities. This involves controlling activities which cause the degredation of the marine and coastal environment and ports, including the safety of navigation, pollution prevention and control. The Ministry has jurisdiction over the maritime demesne and is also responsible for the implementation of the maritime code. This Ministry has five departments as well as a newly created legal department, two autonomous agencies also function under this Ministry, namely the Somali Port Authority and the Somali Shipping Agency

1.2.1 The Somali Port Authority

Established in 1962, was reorganized by Law No. 1 of 7 January, 1973. The Port Authority is responsible for the operation and management of all the ports in the country as well as the provision of port services, including those relating to the monitoring of pollution and waste discharges. For the purpose of implementation of its functions the Port Authority has port regulations, (decree No. 67 of 15 April, 1978).

1.2.2 The Somali Shipping Agency

Established by virtue of Law No. 27 of 1 June, 1978, the main objectives are to:

perform all activities concerning services to ships anchoring at the Somali ports;

repair, purchase, sell or hire ships or spare parts;

- perform any other activities related to the shipping trade.

The Ministry of Marine Transport and Ports also chairs the National Committee on Marine Affairs which was established for the Law of the Sea negotiations and to participate in meetings of Indian Ocean Coastal States and the Eastern African Action Plan.

1.3 Ministry of Fisheries

The Ministry of Fisheries was established by Law No. 17 of 3 February, 1977, for the development and management of fisheries resources. Amongst others, its functions are to:

- develop a programme to make coastal settlements self-supporting;
- obtain benefits from marine resources;
- organize and operate maritime schools;
- construct infrastructures namely, ports and cold storage;
- prevent pollution through international law of the sea;
- formulate laws regulating fishing in Somali waters as well as organize fishing rights.

Seven autonomous agencies function under it, namely:

- Coastal Development Project
- Somali Marine Product

North West Fishing Development Project

North East Coast Fishing Enterprise

- Somali Fish Company

Malhir Coast Fish Company

Somali Boat Factory

The Ministry of Fisheries also leads the Somali Government's participation in the Red Sea and Gulf of Aden Action Plan.

1 4 Ministry of Minerals and Water Resources

This Ministry was established by Law No. 8 of 24 May, 1969 The main responsibilities of this Ministry are:

i. the development of mineral resources which include mining as well as geological surveys. This Ministry is responsible for the implementation of the mining code, which include the issuing of all exploration and exploitation permits;

ii the development of water resources within the country The Ministry is responsible for the implementation of the water law No 11 of 18 November, 1972 Two autonomous agencies are under the supervision of the Minister, namely the Water Development Agency created by Law No. 28 of 20 February, 1971, for the purpose of the development of water resources within Somali territory and the Mogadishu Water Agency created by Law No. 18 of 6 April, 1978, for the purpose of assigning tasks for organising, implementation and operation tasks of the Agency in general and in particular to the establishment of the Mogadishu Sewerage Project besides other water resources activities.

1 5 Ministry of Interior

This Ministry operates resettlements schemes with the provision of water supplies, as a result it is particularly involved in rural areas, in the monitoring of activities which have negative consequences on the environment

1 6 Ministry of Livestock, Forestry and Range

This Ministry which was created by Law No. 8 of 24 June, 1969, is responsible for the control of animal husbandry, veterinary services, range, forestry and national parks. It operates through two agencies.

1 6.1 The National Range Agency

This agency was established by Law No. 23 of August, 1976, and has the objective of ensuring the management of livestock, grazing and forest resources, including the prevention of overgrazing through the control of watering points, monitoring of deforestation leading to desertification, and preparation of plans, action programmes and mobilization of rural people to ensure reforestation and sand dunes fixation to combat desertification

1.6 2 The National Parks Agency

This Agency was created in 1971 by Law No 34 of 1 March, 1971 Its main objective is to establish and maintain national parks and reserves.

1.7 Ministry of Commerce and Industry

This Ministry has drawn up a commerce and industry policy including the implementation of factories and the creation of industrial zones However, each industrial sector and manufacturer has its own regulations Twenty four autonomous agencies function under the supervision of the Ministry Of importance to this report is the National Petroleum Agency.

1.7.1 The National Petroleum Agency

This Agency controls the imports, exports, refining and distribution of oil

1.8 Ministry of Agriculture

This Ministry was created by Law No. 14 of 3 June, 1962, as amended in 1969. It has the responsibility for the development of irrigation, land settlement, reclamation and improvement, plant and animal protection, locust control and fertilizer registration. It is also involved in issues concerning land and water degredation and pollution. The Ministry has several autonomous agencies and projects under its supervision, among which are:

1.8.1 The Agricultural Development Corporation

Created by Law in 1970, its main objective is for the purpose of promoting agricultural production through the provisions of seeds, fertilizers, pesticides, water pumps, farm machinery and other related inputs

1.8.2 Agricultural Development Project

This project was established by Law No 5 of 19 February, 1979, for the purpose of the development of agriculture in the North Western region The main objective amongst others are to prevent desertification of agricultural lands and develop irrigation.

1.9 Ministry of Tourism

Although this Ministry established by Law No. 32 of 8 July, 1970, is not in fact directly involved in natural resources management, its interests lie in activities to improve or conserve natural resources such as flora, fauna, water, coastal areas and beaches, The autonomous agency, the Somali National Tourist Agency functions under the supervision of the Minister

1.9.1 The Somali National Tourist Agency

The development of the Tourist Act of 1984 created this agency. Its main objectives amongst others are to:

promote the maintenance of the beauty of tourist resorts and preserve the cultures and wildlife heritage

1 10 Ministry of Planning

This Ministry was established by Law No 10 of 1 January , 1966 This Ministry prepares plans, supervises implementation of development works. evaluates external and internal financial resources and publishes data on national plans and economic trends

There are plans in creating a National Environmental Coordination Committee to be chaired by the Minister of National Planning, composed of all the ministries concerned

1 11 Ministry of Health

This Ministry is involved in monitoring all activities which cause pollution, with particular regards to its consequence on human health. It has a unit dealing with the control of environmental sanitation and pollution questions, however, its capabilities are limited.

1 12 The Ministry of Justice and Religious Affairs

This Ministry is involved with the study and drafting or amendment of any required legislation

The National Commission for legislation which is composed of the Vice President of the Supreme Court, a judge of the Supreme Court, a legal advisor of the Ministry of Justice, the Deputy Attorney General and the Director of Judiciary and Professional Affairs is chaired by the Director of the legislative department examines all draft laws before their submission to the Council of Ministers and to the People's Assembly.

1 13 The Ministry of Foreign Affairs

This Ministry is involved with the study and acceptance of international agreements.

1 14 Research and Training Institutions

i The National Range School is the only training institute dealing with environmental management and pollution control administration

ii The National Fisheries and Maritime Institute in Mogadishu is devoted to maritime training

iii. Mogadishu Technical Institute

iv The Marine Research Centre

2 SURVEY AND ANALYSIS OF EXISTING LEGISLATION RELEVANT TO THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT

2 1 Limits of National Jurisdiction

Presidential Decree No. 46 of September, 1979.

Article 5 Territorial sovereignty shall extend over the land, the sea, the water column, the sea bed and sub soil, continental shelf, the island and air space

Article 42. States that the land, natural marine and land based resources shall be State property and that the State shall issue legislation to exploit these resources

Law of the Somali territorial sea and ports. Law No. 37 of 10 September 1972

Article 1 The Somali territorial sea includes the portion of the sea to the extent of 200 nautical miles from the continent and insular coasts.

The low water line along the coast is the normal baseline for measuring the breadth of the territorial sea, however, where the coastline is deeply indented or if there is a fringe of islands along the coast in its immediate vicinity, the method of straight baseline joining may be employed. Waters found on the landward side of the baseline of the territorial sea form part of the internal waters of the State.

Article 3. Where an island exists within the 200 nautical mile limit, the surrounding belt of water constitutes the territorial waters This belt of water shall be the sinuosities of the island. A group of islands that form part of an archipelago is considered as a unit and its territorial waters shall be measured from the centre of that particular archipelago.

The internal waters include all navigable waters in Somali rivers open for maritime vessels and ports

Passage of vessels having the nationality of a State not recognized by Somalia are not allowed in the territorial sea and internal waters

Fishing in the territorial sea and regular transportation of persons and goods between Somali ports are reserved for vessels flying the Somali flag and other authorized vessels. Although Somalia has signed the United Nations Convention on the Law of the Sea it has not yet ratified it. Although there are some similarities between the Convention and the Somali provisions governing the navigation of its territorial seas, the main difference is that the Convention's provisions apply only to a 12 nautical mile territorial sea, with more liberal navigational rights recognized in the 200 nautical mile EEZ

In regards to the Convention's provisions on the protection and preservation of the marine environment, the exploration and exploitation of the resources of the continental shelf or the sea bed of the territorial water and marine scientific research, Somalia has no basic provisions in its law.

Maritime Demesne

Maritime Code. Law No. 3 of 7 January 1976

Article 1. The maritime demesne includes: beaches, shores, ports, bay inlets, mouths of rivers flowing into the sea and basins of salt or brackish water which directly communicates with the sea. Buildings and other works belonging to the administration, existing within the limits of the maritime demesne and of the territorial sea, are considered as pertinencies of the same demesne. The maritime administration regulates the use of the maritime demesne and exercises policies on the same.

Article 12. The shore shall include that portion of the coastline extending as far as the highest water mark at high tide. The extension of the shore shall be determined by the maritime offices on the basis of ascertainments carried out locally and of the testimony of other persons who are familiar with the place. The beach shall include the land next to the shore, which can be destined for the public use of the sea. Where the extension of the beach is not determined by the subsequent articles, it shall extend as far as the nearest land publically or privately owned.

Article 13. The delimitation of specific zones of the maritime demesne with respect to public or private property referred to in article 12 is effected by the head of the maritime zone.

Article 15: The exclusion from the maritime demesne of zones which cannot be used for public sea uses are provided for by a decree of the Minister.

Article 16: Unauthorized occupation of the innovation on properties of the maritime demesne, their pertinencies and the territorial sea are prohibited.

Article 17: The maritime administration, consistent with the needs connected with public use, can grant the occupation and use of the maritime

Article 24: Concessions for the installation and management of factories and coastal storage of flammable products located within the limits of the territorial sea are granted by the Ministry of Marine Transport and Ports.

Article 28: Activities carried out by anyone in ports, or generally within the limits of the maritime demesne, are subject to the supervision of the maritime authority.

Article 30. In ports and other places of call or passage of ships, fishing, deflagration of explosive substances as well as lighting or lights or fires which are likely to trouble the signalling services are subject to authorization of the maritime authority.

Article 55. When dangerous goods are clandestinely loaded on a vessel, the master, as soon as he has discovered them, must order that the same be unloaded or, if sailing, must render them inoffensive or destroy them if it is not possible to store them safely until arriving at the first port of call

Although the maritime code covers the maritime demesne quite substantially, there are, however, no provisions in the maritime code concerning the coastal area management.

2.2. Legislation Relevant to Marine Pollution

2.2.1 Marine Pollution by Ships

(a) Operational Discharge by Ships

Port Regulations Presidential Decree No. 67 of 15 April, 1978

Section 17: Ships in ports or at anchorage or within the vicinity of the ports are not under any circumstances allowed to discharge oil and other substances causing pollution or waste into the sea.

Section 21: Ships in the port are not permitted to throw or discharge refuse, waste, garbage or other disposable matter into the port waters or overboard.

Section 22: Normally each port provides a garbage service at cost. The use of that service is compulsory, where garbage is not run by the port the service shall be undertaken by agents or contractors duly authorized by the Port Manager.

Section 77: Prescribes a fine of Shs. So. 200 to Shs. So. 5,000 for any violation of the provisions of the regulations. The fine shall be imposed by the Port Manager.

The existing regulations which relate to marine pollution by ships are very limited and only concern the pollution in ports or within the vicinity of the ports. Those regulations are also contained in the existing Maritime Code. The Somali Government has no specific regulation which apply to areas outside the ports or the vicinity of the ports.

Although Somalia is a member of IMO and has accepted the IMCO Convention of 1948, many amendments have been made to the Convention as well as the change of the name of the organization which is now known as the International Maritime Organization IMO, it is most important that the Somali Government ratify these amendments. The Somali Government should also become a party to the Oilpol 1954 Convention which is now dealt with by the MARPOL Convention 1973/1978. This Convention applies to all ships flying the flag of a Party to the Convention and to all substances considered as harmful. The purpose of the Convention is to control operational spills of oil, noxious substances, sewage water or garbage. An important general provision of this Convention is to reinforce the rights and the possibilities of effective surveillance of the coastal State and port State which are party to the Convention. This Convention not only enhances the rights and possibilities of effective surveillance but also enhances the control of the pollution of their waters.

(b) Accidental Discharge by Ships

i. The Prevention of Maritime Accidents

The IMO Conventions on maritime safety are the main legal instrument for the prevention of accidents and the prevention of discharge into the sea of oil or other hazardous substances.

These Conventions are:

- the International Convention for the Safety of Life at Sea, (SOLAS) 1974 amended in 1978, 1981 and 1983;

- the International Convention on Load Lines, (LL) 1966; and

- the International Regulations for Preventing Collisions at Sea, (COLREG) 1972.

Somalia has no specific legislation on this subject matter. The Somali Government has, however, already ratified the SOLAS 1960, but it has not ratified SOLAS 1974, and the International Convention on Load Lines (LL) 1966.

The Somali Government should ratify SOLAS 1974 and its 1978 Protocol as amended as well as the International Regulations for Preventing Collisions at Sea (COLREG) 1972. The main objective of the SOLAS Convention is to specify minimum standards for the construction, equipment and operations of ships, compatible with their safety. The COLREG 1972 Convention is a code of good conduct at sea which should be introduced into their national legislation. The Somali Government moreover should take full account in incorporating key provisions of the International Maritime Dangerous Goods Code.

ii. Prevention and Control of Pollution after Maritime Accidents

Port regulations 15 April 1978

Section 30: In the event of a vessel being grounded or stranded the master or the person in charge shall take immediate steps and reasonable precautions to prevent pollution.

Maritime Code Legislative decree No. 1 of 21 February 1959, amended by decree Law No. 7 of 1 November, 1966, converted and amended by Law No. 3 of 7 January, 1967.

Article 26: In case of submersion of goods or other materials in ports, the persons concerned must provide for their immediate removal, should they fail to fulfill this obligation, causing danger or hinderance to navigation, the authority will order that removal be carried out.

Legislation governing the prevention and control of marine accidental pollution in Somalia is limited. Somalia should adopt regulations for the

intervention in case of emergencies in its territorial sea and maritime demesne. If the Somali Government were to adopt new legislation concerning the territorial sea of 12 nautical miles in conformity to the United Nations Law of the Sea Convention it would be in their interest to ratify the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, Brussels, 1969 and its 1973 Protocol relating to intervention on the high seas in cases of pollution by substances other than oil.

The importance of controlling and preventing marine pollution by oil can be further highlighted by the fact that the seas off Somalia as well as Kenya and Tanzania lie within the world's major maritime transportation corridor for crude oil, which comprises the route for large tankers from the Middle East to Europe, the Americans and East and West Africa.

iii Contingency Plan to Combat Accidental Pollution

At present Somalia has no national contingency plan for dealing with oil pollution of the sea or other hazardous substances However, due to the unfortunate incident of the Ariadne accident the Somali Government have established a contingency plan. However, it is important and necessary that they adopt an appropriate national organization and a national contingency plan with a view to take immediate steps in the case of an emergency. This would require the Somali Government to be prepared to request and organize international assistance and co operation within the framework of regional agreements which deal in combating marine pollution in case of emergency The Somali Government would therefore have to adopt the two Regional Seas Convention and their Protocols namely the Red Sea and Gulf of Aden Convention and East African Convention.

iv. The Liability and Compensation for Pollution Damage

Somalia has no specific legislation on this subject matter, besides a few provisions in the maritime code concerning the liability of the master of the ship relating to shipping activities. It is therefore in the interest of the Somali Government to ratify the relative conventions and also to adopt appropriate national laws, namely:

- International Convention or Civil Liability for Oil Pollution Damage, Brussels, 1969;

- Protocol of 1984 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969;

- International Convention on the Establishment of International Fund for Compensation for Oil Pollution Damage, 1971;

- Protocol of 1984 to amend the International Conventions for the establishment of an International Fund for Compensation for Oil Pollution Damage, 1971; and

- International Convention Relating to the Limitation of the Liability for Maritime Claims, London, 1976.

2.2.2 Pollution Resulting from Exploration/Exploitation of Sea-bed Minerals

The Ministry of Minerals and Water Resources are responsible for the implementation of the mining code to which the exploration and exploitation of sea-bed mineral resources are under

Mining Code

Article 2. The entire ownership and control of all minerals are vested in the State

- in any land in the Republic,
- under territorial sea as determined by the maritime legislation in force; and
- on or under the sea-bed beyond territorial limits to a point where the sea is 200m in depth and beyond to such depths of the superjacent waters as admit of the exploitation of minerals.

Article 53: No person shall explore, prospect or mine any mineral or oil except in accordance with a permit or lease granted under the provisions of the Mining Code.

Article 54: Subject to the provisions of the Mining Code and Regulations, the Minister may with the approval of the Council of Ministers, in the prescribed manner, grant:

i an oil exploration permit to explore for mineral oil in any lands and under any waters in or adjacent to the Republic as may be specified in the permit;

ii oil prospecting permit to prospect or drill for, extract and remove for the purpose of test and research, mineral oil from any lands and waters in or adjacent to the Republic as may be specified in the permit;

iii. an oil mining lease to explore and prospect for, mine, remove process for sale, and dispose of mineral oil from any lands and waters in or adjacent to the Republic as may be specified in the lease Such a grant may be subject to such terms and conditions as the Minister may with the approval of the Council of Ministers determine.

Article 96. No person shall in the course of prospecting or mining operations permit any noxious or poisonous matter to pollute water in use by the public, nor shall he discharge sand, a slime or other tailings in a manner as to interfere with any such use.

Article 101. Any person who prospects or mines on any area referred to as prohibited, shall be guilty of an offence.

This law empowers the Minister to introduce in the mining permits or concessions any provision that might be required to prevent and control marine environment pollution due to mining activities.

The Ministry of Mineral and Water Resources has also established under the legal framework of the mining code a draft concession agreement which will be proposed by the Government to the oil companies. This concession agreement provides provisions which commit the oil companies to take measures to prevent and control marine environment pollution due to their mining activities.

It would be in the interest of Somalia to ratify the 1988 Convention on the High Seas which requires States to adopt legislation for the prevention of pollution resulting in the exploration and exploitation of the sea-bed and its subsoil

2.2.3 Marine Pollution by Dumping of Wastes and Other Matter

Specific legislation on this subject matter does not exist. It would be in the interest of the Somali Government to ratify the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter and the London Dumping Convention (LDC) 1972. This Convention regulates the deliberate disposal at sea of wastes from vessel, aircrafts or other man made structures at sea, excluding operational discharges. More specifically the Convention defines three categories of wastes:

- wastes, the dumping of which is prohibited;
- wastes, the dumping of which requires a prior special permit; and
- all other wastes, the dumping of which requires a prior general permit

In ratifying this Convention the Somali Government must establish national regulations in this field.

2.2.4 Marine Pollution from Land-Based Sources

Legislation to prevent, reduce and control pollution of the marine environment from land-based sources do not exist in Somalia. Pollution from land-based sources is defined as pollution of the maritime area by direct or indirect discharges on the sea, of industrial and domestic wastes and of pesticides which come to the sea through rivers.

Specific legislation concerning the prevention and control of land-based pollution by domestic and municipal wastes does not exist in Somalia.

Specific regulations for the use of pesticides in a view to avoid pollution of the maritime environment does not exist either. However, the law concerning pesticides, Law No. 49 of 13 July 1971, may provide the legal foundation under which comprehensive legislation on the use of pesticides could be established.

Pesticides Law No. 49 of 13 July 1971 S. 3/7

Article 2: This law applies to the registration of:

- active ingredients and pesticide formulations; and
- adjurants sold to a grower or other used for addition at the point of use to the spray tank or other container of pesticide formulations.

It defines "pesticide" as any product proposed or used for controlling a pest and includes active ingredients, adjurants and pesticide formulations.

Article 4: No person or corporate body shall distribute, sell, offer for sale or deliver within or import into the country pesticides unless it has been registered under this Law.

2.3 Legislation Relevant to Coastal Areas Management and Development

Legislations and regulations relating to the development and management of coastal areas do not as such exist in Somalia. The management and development of coastal areas requires interministerial activities and most important of all the need for interministerial coordination. As such Somalia would benefit more, by firstly building up the machinery for coastal management and development and thus adopting legislation to this end. As such the Somali Government should:

- identify the ministries and agencies concerned and a ministry which will promote plus coordinate these activities;
- create an interministerial coordination body mechanism;
- formulate a feasible approach; and
- prepare a pilot regional project and mobilize national agencies and regional and local governments.

2.4 Legislation Relevant to Marine Living Resources

2.4.1 Fisheries Legislation

The fisheries legislation contained in the maritime code of 1959, which entrusted fisheries management and regulations to the maritime authority now falls under the Ministry of Fisheries which was established in 1977.

Due to the inadequacy of the provisions of the maritime code, the Ministry of Fisheries has drawn up a national fisheries regulation on the basis of a draft proposal by a FAO expert.

Fisheries Law No. 23 of 30 November 1985 has been promulgated and entered into force. The Law covers all aspects of fisheries including administration, management, planning, licensing and enforcement.

Somali Fishery Law No. 23 of 30 November 1985

Article 2. Management. The Ministry shall be responsible for the necessary safeguarding and development of the fishery and the proper implementation of the general control and administration of this law

Article 3: Fishing Data. The Ministry shall compile statistical data and other related information regarding fishing and coordinate and administer and publish information regarding Somali fishery activities.

Article 4: Fishery Development. The Ministry is responsible for implementing the development of fishery activities in the country.

Article 5. Prohibitions. It is forbidden to anybody to carry out any activity or use material or equipment which may cause death, pollution, injury etc. to the aquatic animals. It is also forbidden to anybody to possess equipment or materials which can cause damage to aquatic animals in the fishing area and sell or exchange fish or other aquatic animals caught as stated in this article.

Article 6. Seasonal Closing Period. The Minister may give a written order closing the fishing season indicating the area, type of fishing equipment and the fish or aquatic animals. The order shall state the starting period and closing period. The Minister may also decrease or increase the limitation period when it becomes necessary.

Article 7: Fishing Licence General Provisions. The Ministry may grant fishing licences for the country sea water and inland water.

Anyone who is interested in fishing or in rearing fish in inland water shall have a fishing licence and entrance permit for the country This licence shall not concern persons who are not using marine transport.

The Ministry shall grant the applicant the necessary fishing licence and shall make a separate register for the licence granted by this law

The application for a fishing licence may be submitted and shall state briefly the following:

i. name, description of the ship, flag and country of registry;

ii. name of the owner, leaseholder, if any, and captain of the ship;

iii number of the ship;

iv. description of the fishing activities requested by the applicant:

- the type of fishing;
- the method of fishing and the equipment;
- location where the production is to be landed and the description of the marketing; the final processing of the products and the utilization of the products;

location for fishing,

the number of the fish or other aquatic animals which may be caught;

the period in which the licence is to be valid;

a description of the Assistant Captain, the management, the name and the licence of other auxiliary ships;

a description of Somali co-operation or other interest in the venture;

any other information requested by the Ministry; and

bank guarantee.

The licenced ship shall within 30 days notify the Ministry of any changes occurring such as the transfer of ownership, lease, etc.

The number of licence, the name of the ship and the registered port shall be clearly written and shown on the ship and on the sides of the ship

Article 8. Obligations of the Fishermen. Any person granted a fishing licence must obey the laws of the country and the regulations of the Ministry, and submit reports regarding fishing activities; amount, types including by-catch, products, the location and the method of fishing, and the fish and other aquatic animals which can be merchandised or processed

Article 9 Research. The Minister may, in writing permit any person or any ship that possesses an entrance permit to conduct research on fisheries and other related activities regarding marine resources

Article 10. Control and Inspection. Anybody practising fishing may be inspected or searched when necessary. Apart from the specialized agencies the regional and district authorities or any other authorized person may, with the prior approval of the Ministry, inspect or search any person conducting fishing activities Anybody who violates the provisions of this law, shall be taken to the nearest port of the country. If a ship commits an offence in Somali waters and crosses the boundary to another country, the matter will be discussed with the concerned authorities according to International Law

Article 11 Traditional and Modern Fishing. The Ministry shall promote the development of traditional and modern fishing activities and all related matters, with the assistance of the competent government agencies It will ensure that modern fishing does not harm or impede the development of traditional fishing

Article 12. Penalties. It is an offence to infringe on Articles 8 and 10. If the offence is more serious or the offender commits the same offence again the matter will be dealt with under the Criminal Procedure Code.

It is an offence for anyone to:

use explosive materials;

use or possess materials or equipment in prohibited areas;

fish in the closed period;

fish prohibited fish or other aquatic animals; and

fish with prohibited materials or equipment.

Anybody who fails to perform his duties and fails to fulfill the terms and conditions of the contracts shall lose his licence.

Article 13. The Somali Navy shall have the powers and the responsibility for the enforcement of this Law.

Article 14: If a person commits an offence under this law, his equipment, engine and any other materials used during the commission of the offence may be forfeited. All fish and other aquatic animals found in the ship may also be seized. All offences under this law shall come under the competence of the National Security Court.

Article 16: The President of the Somali Democratic Republic may make regulations for the proper implementation of this law. Furthermore, the Minister of Fisheries and Marine Resources may make regulations regarding the proper management and development of fishery activities.

Regulations

Part II - General Licencing Provisions

Fisheries Joint Venture Guidelines of 1985

Article 3: Joint Venture shall be classified as:

i A company, society or other association of persons established for the purpose of installing fish processing facilities and/or chartering of vessels for the purpose of exporting their products and importation of fishing equipment and supplies required including fishing gear.

Article 4: An application for joint venture agreement is to include the following documents:

i. Capital investment and equity share plan by both parties for fixed asset with inventories for working capitals;

ii. Draft articles of Joint Venture Company, society or other association of persons - Head Office, Joint Venture period, purpose and activities, staff organization by nationality, responsibility of management staff, account year, auditing system, production of joint venture financial statements including balance sheets and profit and loss accounts, plan of profit distribution and reserves, a mean of setting any dispute, etc.

Best copy availa

iii Joint Venture Operation plan;

(a) For fishing operation:

kind and size of boats to be used;

composition of crew by title, nationality and qualifications;

type and size of fishing gear and methods to be used;

fishing base and fishing grounds/area;

fishing period and fishing days;

kind of fish to be caught;

operations unit (Fleet's composition, facilities, infrastructure)

estimated catch

processing and marketing of catch;

estimation of operational cost and income; and

vessel's repair, dry-docking, bunkering, crew's provisions, fishing gear supply plan.

(b) For processing and marketing operation:

details of plants, facilities and equipment and their estimated costs

staff organization;

fish purchasing and collection plan;

processing and quality control plan;

fish marketing plan, domestic market and export markets by type of processing and expected prices.

iv Place of training of Somali employees and staff replacement

Article 5 Limitation for Optimum Utilization. When the estimated catch total by kind of fish by Somali fishermen and joint venture operation reach a certain quantity or a sign of over-fishing is observed, or envisaged to reach within the fishing efforts by already operational fleet, any new joint venture application will not be accepted

Article 6. Resource Protection. For protection of endangered species, no person is allowed taking, killing, selling or processing female turtle in the sea within any reef or within any reef of within 1 km of the high water mark of the Somali shore, or to take or sell any turtle eggs after they have

been laid and buried, or any sea turtle weighing 7 kg unless otherwise authorised by the Ministry for scientific purpose. For resources management of shallow water spiny lobsters, no person is allowed taking, killing, selling or processing spiny lobster weighing 460 grams (or tail weight of 120 gr), or with the stretched length from eye to tail and measuring 23 cm or less, or female lobster carrying eggs.

Article 7. Vessels of 18 m LOA and above cannot carry out any fishing within 5 miles of the high water mark of the Somali shore.

Article 8 Prohibited Methods of Fishing

The following methods of fishing are prohibited:

i the use of any explosive, poison, or other noxious substance for the purpose of killing, stunning, disabling or catching fish, or in any way rendering fish more easily caught; and

ii catching spiny lobster by using aqua-king or similar device or trammel net

Article 9. Restriction Landing Marketing and Inspection. Proceeds from the joint venture shall be landed at a Somali port, where holding facilities exist. An export licence covering the sale of any of the product abroad shall be obtained by the Company and a letter of credit for such export shall be opened with a Somali bank. In the event that such holding facilities doesn't exist on the operational base and the proceeds has to be exported, an inspection shall be carried out prior to the departure of the carrier vessel. An official of the MOFMR shall always be a member of the inspection team.

Article 10. Licence Subject to Conditions. Licences issued under this Guideline shall be subject to such conditions as may be prescribed, or as may be otherwise endorsed upon such licence by the Minister or his deputy, and such conditions may include any or all of the following

(a) the area in which operation/fishing is authorized;

(b) the period during which operation/fishing is authorized;

(c) the species, size, sex and quantities of fish that may be taken.

(d) the methods by which fish may be taken;

(e) the types, size and amount of fishing gear that may be used by the fishing vessel;

(f) statistical and other information required to be given by the master of the fishing vessels or by the operator(s) of the joint venture company, society or other association of persons to the Minister of his deputy, including statistics relating to catch and effort, and reports as to the position of vessels and fishing and sea conditions, or disposal, processing and marketing informations;

(g) the marking of vessels and other means for its identification;

(h) such other terms and conditions as the Minister or his deputy may consider necessary or expedient for conservation management and development of fishing resources of Somalia;

(i) entry by foreign fishing vessels to Somali ports, whether for inspections of fishing gear of catch, landing of catch, or any other purpose,

(j) the reporting of the position, catch by species, weather and sea conditions, etc , of the fishing vessels daily by radio or monthly in pre-arranged form to the Minister or his deputy;

(k) the carriage on board of specified communication, safety or navigational equipment, publications or instruments; and

(l) the training of citizens of Somalia in the methods of fishing or operation employed by the joint venture company.

Article 11. The expected foreign partner should submit to the licencing authority a copy of an authenticated registry of the company of their country and an audited financial statement for the past two years Similarly documented approval of foreign company's technical capability as well as past experience shall be submitted.

A bank guarantee covering share of foreign partners investment shall be issued and submitted. In case of doubt, the embassy of the foreign partner may be requested to attest.

Article 12. Letter of Intent When the application for a joint venture licence together with all the necessary documents is received and concluded by the Ministry that the plan is economically sound and practicable, beneficial for the country's economy and its operation is unharmful to the marine resources protection and will not conflict with the Somali traditional fishermen, a letter of Intent may be given to allow the licence to initiate preparatory work

Article 13. If it deemed necessary a temporary fishing licence to start survey of experimental fishing may be issued for the operating period of three months or less on submission of the following document to the Minister or his deputy:

i. a copy of vessel's registration document to verify ownership, gross tonnage, net tonnage, length, engine horse power, port of registry, fish hold capacity;

ii in case if the name of the vessel's ownership is different from either of those of the joint venture partners, a copy of authenticated chartering agreement between the vessel's owner and the Joint Venture Party; and

iii detailed crew's list.

During this period, the temporary fishing licence fee shall be charged at a fixed rate as prescribed in this guideline

Article 14 No licence issued under this guideline shall relieve any joint venture company, society or other association of persons, or any foreign vessel or its master or crew of any obligation of requirement imposed by Somali financial transaction laws, foreign investment law, civil Law, labour law concerning navigation, customs, immigration, health or other matters

Article 15. The Minister or his deputy may, when all the provisions in this guidelines are satisfied, issue a licence in the prescribed form in respect of any joint venture operation, upon payment of the prescribed licence fee

Article 16. Cancellation or suspension of Licence. The Minister or his deputy may cancel or suspend any licence that has been issued in respect of any joint venture operation when he recognizes that:

i it is necessary to do so in order to allow for the proper management and development of any particular fishery in accordance with the terms of any fisheries management and development plan, or

ii the operation in respect of which the licence has been issued has been used contravention of this Guidelines or any conditions of the licence

Article 17: Unless earlier cancelled in accordance with Section 11, a licence shall be valid for a period not more than one year, subject to yearly extension on application for the planned period. No licence shall be transferable except with the written permission of the Minister or his deputy which is to be endorsed upon such licence.

Article 18. It shall be a condition of the licence that a copy of the licence shall be carried on board any licenced fishing vessel or in operation site, and made available to any authorized officer or observer upon request.

Article 19. The Minister or his deputy may appoint one or more observers for the purpose of monitoring the operations of joint venture/fishing activities under the Guidelines. All the expenses including transportation, subsistence allowance of the observer to carry out the prescribed duties shall be borne by the JV.

Article 20: Any licences under this Guidelines fails or refuses.

i to permit or assist an observer to come and remain on board or inside to exercise of any power to examine or inspect or observe the operations, records or documents to confirm the fulfillment of the conditions provided in the licence or under this Guideline; and

ii. is guilty of an offence and is liable to an immediate cancellation of the licence

2.4.2 Endangered Species

No specific laws and regulations exist relating to the protection of marine endangered species, however, Somalia has signed and ratified the Eastern African Action Plan and its Protocols

The Protocol concerning Protected Areas Wild Fauna and Flora in the Eastern African Region specify that the contracting parties shall take all appropriate measures to ensure the protection of wild fauna species listed in annexes of the Protocol The Ministry of Fisheries should adopt appropriate legislation for the implementation of this Protocol.

Moreover, the Somali Government should ratify the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 1974 (entered into force 1975) The objectives being to protect certain endangered species from over exploitation via a system of import-export permits. The Somali Government should also ratify the Convention on the Conservation of Migratory Species of Wild Animals, Bonn 1979 This Convention also contains provisions relating to endangered marine species

2.4.3 Protected Areas and Reserves

Somalia nevertheless has some basic regulations: .

- the law on Range Development and Management of 4 February, 1979;

- the law on Fauna (Hunting) and Forest Conservation of 25 January, 1969.

- the decree on protection of wild game, and

- the law on the national parks agency of 1 March, 1971

These laws establish the responsibility of the Ministry of Livestock, Forestry and Range to create and maintain national park and game reserves and to prevent the destruction of the game resources.

The Ministry of Livestock, Forestry and Range should have the responsibility for marine and coastal protected areas and should co-operate with the Ministry of Fisheries, the Ministry of Transport and Ports, the Ministry of Tourism and the University in developing a national policy and legal framework concerning marine and coastal protected areas

Moreover, Somalia should ratify the Convention on Wetlands of International Importance Especially as Waterfound Habit, (RAMSAR 2, February, 1971, entry into force 21 of December 1975)

Summary

The existing legal framework governing the protection and development of the marine environment and coastal areas is limited and incomplete Except

for the protection of the marine environment in relation to offshore mining and fisheries there is a considerable lack of specific legislation in the field of marine pollution and coastal areas management. It is apparent that without supplemented human and financial resources Somalia will be unable to adopt, implement and enforce a complete legal framework on its coastal and marine resources

Responsibilities relating to the fields of marine pollution and coastal area management are not clearly defined and established Marine environmental policy does not exist as such and there is no Ministry of Environment Ministries and agencies often carry out their activities independently without previous consultations with other involved agencies concerned In Somalia the field of marine environment and coastal area management involve many ministries and agencies, it would perhaps require an interministerial coordinating machinery. Coordination between ministries and agencies would have to be strengthened and institutionalized

With the exception to offshore mineral exploitation and fisheries, there is a lack of specific legislation, which leaves a great deal of work to be done. With regards to International Conventions and International Action Plans and Regional Agreement, Somalia has signed a limited number and has ratified even less. It is most important, because, International Conventions provide basic standards to be followed. Somalia needs to take action in this field, however, its resources and capabilities are limited, it is therefore necessary for Somalia to make a choice and identify its priorities and/or co-operate with its neighbouring States.

SUDAN

1 EXISTING MACHINERY FOR THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT

No information was available to the author. However, after reviewing the existing machinery of the other States it can be speculated that the existing machinery in Sudan requires similar organizational and coordinational reforms

2 SURVEY AND ANALYSIS OF EXISTING LEGISLATION RELEVANT TO THE PROTECTION AND MANAGEMENT OF THE MARINE AND COASTAL ENVIRONMENT

With regards to this subject matter little information was available to the author which will be outlined below

2.1 Limits of National Jurisdiction

Resolution No. 1047 of 2 August 1960

The council of Ministers of Sudan resolved that the territorial sea of the Sudan shall have a breadth of twelve miles.

Territorial Waters and Continental Shelf Act No. 106 of 28 November 1970

Article 5. The Territorial Waters of the Democratic Republic of the Sudan extend seaward to a distance to twelve nautical miles and shall be measured from the straight baseline as marked on large-scale maps recognized by the Democratic Republic of Sudan

Article 6. If the delimitation of the territorial waters in accordance with the provisions of this Act results in any portion of the high seas being wholly surrounded by territorial waters and such portion does not extend more than twelve nautical miles in any direction, such portion shall form part of the territorial waters.

Article 9. The Government may exercise necessary control cover over the high seas contiguous to its territorial waters up to a distance of six nautical miles measured from the limits of the territorial waters of the Democratic Republic of Sudan, to prevent infringement of its customs, fiscal immigration, sanitary or security laws within its territory or territorial waters and to punish infringement of any of the laws aforesaid committed within its territory or territorial waters.

Article 2. "Continental Shelf" means the sea-bed and subsoil of the submarine areas but outside the territorial waters of the Democratic Republic of Sudan, to a depth of two hundred meters or beyond that limit to where the depth of the superjacent water admits of the exploitation of the natural resources of the said areas

Article 10 The Democratic Republic of the Sudan shall have the rights of sovereignty over the continental shelf for the purpose of exploring it and exploiting its natural resources and no one shall explore or exploit as aforesaid or make a claim to the continental shelf, without the express approval of the Council of Ministers

Article 12 The rights of the Democratic Republic of the Sudan over the continental shelf shall not affect the legal status of the superjacent water as high seas or that of the air space above those waters.

Sudan conforms, with regards to the limits of the territorial seas to the provision provided by the United Nations Convention on the Law of the Sea. However, the provisions provided under the territorial waters and continental shelf Act of 1990, governing the rights of sovereignty over the continental shelf do not conform with that of the Convention. The Convention stipulates that the coastal state has the sovereign rights for the purpose of exploring and exploiting of the seabed and subsoil to a distance of 200 nautical limits from the baselines from which the territorial sea is measured. The Territorial Waters and Continental Shelf Act, however, stipulates that Sudan has sovereignty over the continental shelf for the purpose of exploring and exploiting its natural resources to depth of 200 meters or beyond that limit to where the depth of the superjacent waters admits of the exploitation of the natural resources. Furthermore the Act makes no mention to the conservation and management of the natural resources in the area.

Having signed the United Nations Convention on the Law of the Sea Sudan should harmonize its national Legislation to its provisions.

2.2 Legislation Relevant to Marine Pollution

2.2.1 Marine Pollution by ships

No information was available on this subject matter

2.2.2 Pollution Resulting from the Exploration/Exploitation of the Sea-bed Minerals

Petroleum Resources Development Act of 1958

This Act covers the whole of the Sudan including the Continental Shelf Foreign companies if organised under Sudanese law, may apply for the necessary permits through the Petroleum Board, which is supervised by a committee of Ministers

A licensee is required to conduct exploration activities and subsequently, if oil is discovered to apply for a lease.

A licence holder who discovers petroleum is entitled to apply for a lease, which confers exclusive rights of exploration and exploitation.

A licensee or lessee may, at the Minister's discretion be required to employ Sudanese at all levels and provide for technical training of certain Sudanese employees.

ii Contingency Plans to Combat Accidental Pollution

From the information available, Sudan at present has no national contingency plan for dealing with oil pollution of the sea or other hazardous substances. Nevertheless Sudan has established a Multi-Departmental Pollution Working Group who look after individual cases and sources of pollution. Furthermore, pollution prevention and planning is accomplished through the office of the assistant commissioner for planning.

Although Sudan has some type of marine pollution preventive body, it should still consider the adoption of a national contingency plan, in light of the recent oil spill, which would enable Sudan to respond immediately to marine pollution accidents.

2 2 3 Marine Pollution by Dumping of Wastes and Other Matter

No information was available on this subject matter.

2 2 4 Marine Pollution from Land-based Sources

The Environmental Health Act of 1975

Chapter IV. Water

Under section 8, the discharge dumping or other disposal of any solid, liquid or gaseous substance into sources of drinking water, rivers or streams, waterholes, wells, or the sea in a manner harmful to human or animal health or prejudicial to other water users is prohibited. More specifically the discharge of the following into drinking-water sources is prohibited.

i treated or untreated chemicals;

ii treated or untreated refuse resulting from human activities in dwellings; and

iii animal corpes or ramians, as well as animal excreta, in or near the sea, rivers or streams, water-courses flowing into waterholes, lakes, wells or ponds.

Under section 9, the district health authorities are required to

1. maintain surveillance of public and private drinking water sources as well as all projects relating thereto, taking samples in order to determine the quality of water source in order to ensure the supply of unpolluted water.

(ii) carry out periodical medical examinations of persons working in contact with drinking-water sources, networks, or systems, in order to prevent the spread of waterborne diseases, and

(iii) provide for the treatment of water sources likely to be polluted in order that they may be utilized

Section 14. Prescribed that the health authorities may authorize the discharge into canals of treated sewage or industrial wastes subject to the following conditions:

1 in the case of a canal receiving only treated sewage or a canal receiving both treated sewage and industrial wastes which flows into a natural watercourse and is used for agricultural irrigation;

(a) the biochemical oxygen demand must be less than 20 mg/litre;

(b) the level of suspended solids must be less than 30 mg/litre of water;

(c) the level of chemical substances in the treated water must be such that human health and that of fauna or flora cannot be affected; and

(d) the health authorities must take all steps to ensure that the treated water is not used for human or animal consumption but only for agricultural irrigation;

ii in the case of evaporation basins it must be ensured that:

(a) the basin is located away from urban or rural dwelling areas;

(b) there is no possibility of overflow; and

(c) the run-off system is designed to prevent the proliferation of mosquitoes.

2.3 Legislation Relevant to Coastal Areas Management and Development

No information was available on this subject matter

2.4 Legislation Relevant to Marine Living Resources

2.4.1 Fisheries Legislation

The Marine Fisheries Ordinance, 1937

Article 3. Fishing craft to have licences. No craft shall be employed for the purpose of fishing in territorial waters unless a valid licence, hereinafter referred to as a fishing craft licence, shall have been issued under this ordinance in respect of such craft

provided that craft employed as aforesaid by persons fishing by way of sport only shall not be reason solely of such employment require a licence as aforesaid

Article 4 Fishermen to have permits No person shall engage in or be employed in fishing in territorial waters unless he is the holder of a valid permit hereinafter referred to as a fishing permit, issued under this ordinance for such purpose

Provided that

i a person who takes fish with a line from the shore shall not require a permit;

ii no member of the crew of a duly licenced craft shall require a permit, and

iii no passengers in craft fishing therefrom by way of sport only shall require a permit.

Article 5 Issue and duration of licences and permits Fishing craft licences and fishing permits under this ordinance shall be issued by the Local Authority on payment of the fees set out in Schedule II hereto, and unless previously forfeited or otherwise determined, shall expire on the 31st day of December next following, provided that the Local Authority may in respect of any craft the owner of which does not live in the Sudan refuse at his discretion to issue a fishing craft licence and in respect of any other craft or person may for good cause shown refuse to issue a fishing craft licence or fishing permit

Article 6. Closed areas. The Minister of Animal Resources may, for the better conservation and development of fisheries, by order published in the Gazette, declare any part of territorial waters to be a closed area

Article 7 Restriction of fishing in closed areas

i No person shall fish in a closed area otherwise than for the sole purpose of sport unless he has previously obtained the permission in writing of the Local Authority.

ii The Local Authority may grant such permission subject to such terms and conditions as he shall think fit, and may refuse such permission at his discretion and without assigning any reason

Article 8. Powers of search examination and arrest. Every police officer, customs officer, or other person duly authorized in that behalf by the Local Authority may, for the purpose of enforcing this ordinance or any regulations made hereunder:

i board and search any craft found in territorial waters or any craft which he has pursued continuously from territorial waters into the high seas and which he, on reasonable grounds, suspects to have been employed for the purpose of fishing in territorial waters,

ii. require any person on board any such craft engaged in or employed in fishing in territorial waters or whom he, on reasonable grounds, suspects to have been so engaged or employed to exhibit his fishing permit, apparatus and catch; and

iii where there is reasonable suspicion in the case of any such craft that an offence has been committed, take the alleged offender, the craft, apparatus and catch without summons, warrant or other process to the nearest or most convenient police station or post The craft and apparatus may be detained pending trial and the catch may be sold and the proceeds of the sale impounded

Article 9 Power of Local Authority to amend schedules and make regulations. The Local Authority may from time to time by order alter or amend or revoke the schedules hereto and shall have power to make, issue and amend regulations not inconsistent with this ordinance;

i requiring all licenced craft to be marked in a certain way,

ii regulating the procedure for the issue of fishing craft licences and fishing permits and laying down forms for such licences and permits;

iii regulating the conditions on which licences and permits may be issued under this ordinance including, with the consent of the General Manager of Sudan Railways and the Director of Customs, conditions as to landing of catches,

iv restricting fishing in certain seasons,

v prescribing limits to the size of fish or marine products of named species which may be taken.

vi prohibiting any method of fishing, and

vii generally for carrying any of the purposes and provisions of this ordinance into effect and for the safeguarding and development of the fisheries of the Sudan and for the protection of persons engaged in fishing;

and may prescribe penalties including the cancellation, suspension or endorsement of any licence or permit issued under this ordinance for the breach of such regulations.

Article 10. Offences and penalties. Any person who acts in contravention of or fails to comply with any of the provisions of this ordinance shall be guilty of an offence against this ordinance and shall be liable to a fine not exceeding LS. 50 or to imprisonment for a term not exceeding three months or to both such fine and imprisonment

REGULATIONS

The Marine Fisheries Regulations

In exercise of the powers conferred on him by section 9 of the Marine Fisheries Ordinance, the Governor of Kassala Province with the consent of the Governor General in Council hereby makes the following regulations:

Article 2. Marking of licenced craft. All craft licenced under the Marine Fisheries Ordinance shall bear the letter "F" painted in ligible Arabic lettering on both sides of the prow after and in addition to any mark directed to be displayed thereon by any regulations made under the Harbours and Shipping Ordinance

Article 3. Place of issue of permits. Fishing craft licences and fishing permits shall be obtained from the office of the Commissioner Port Sudan

Article 4. Landing of catches. No fish or marine products shall be landed except in accordance with the provisions of the Customs Ordinance and of any regulations made thereunder and no fresh fish other than shell fish, but including crustacea, intended for sale shall be landed at Port Sudan except at No 8 Jetty or at Suakin except at the fish market

No marine products other than fresh fish including crustacea shall be landed within three miles of Port Sudan or Suakin except at Flamingo Bay.

Article 5. Limits to size of fish which may be taken. No fish, less than 8 inches in length measured from nose to apex of cuadal fin shall be taken from the sea except.

Bayad	Abeen	Girdas or Kanaf
Gotar	Arabi Kas	Kokoi
Karb	Sardines	Ableim
Gurn or Goarita	Handook	Sharks
Habbabir	Eabat	Swordfish
Sekan	Abu Kohla	Rays

Article 6 Mesh and size of fishing nets. The minimum mesh of nets used for casting shall be as follows:

For Sardines	3/4 inch
For all other fish	1 1/2 inches

Seine nets shall not be more than 200 metres in total length.

The wings (each 1/4 of the total length) shall have a minimum mesh size of 2 1/2 inches and the centre portion (i e. 1/4 of the total length) a minimum mesh size of 1 1/2 inches

Article 7. Prohibition of use of explosives. No person shall use explosives for the taking of any fish

Article 8: Offences and penalties. Any person who acts in contravention of or fails to comply with any of the provisions of these regulations shall be guilty of an offence and shall be liable to a fine not exceeding LS. 10.

In addition to any such fine any Court before which a person is convicted of any offence against the provisions of these regulations:

i. may suspend any fishing craft licence or fishing permit as the case may be for such period as the Court thinks fit and any such licence so suspended shall be void and of no effect as long as the suspension continues in force, and shall be retained by the Court in order to be forwarded to the issuing authority who shall keep the licence till the period of suspension shall have expired; and

ii. may in any case, and shall where an order of suspension is made under paragraph (i) of this regulation order that particulars of the conviction and of any suspension shall be endorsed on any such licence.

On the issue of a new fishing craft licence or fishing permit to any person the particulars of any endorsement on any previous license shall be copied on to the new licence.

Any person obtaining or attempting to obtain a new fishing craft licence or fishing permit during the period of any such suspension without disclosing such suspension shall be guilty of an offence against these regulations.

2.4.2 Endangered Species, Protected Areas and Reserves

The Wildlife Conservation and Parks Act of 1975

This Act vests responsibility for conservation of wildlife in the Department of Wildlife Conservation and Tourism. The Act also provides for the establishment and management of national parks, game reserves and controlled hunting areas. The President of the High Executive Council can declared a national park, whilst game reserves and controlled areas may be established by order of the responsible Minister.

The Act contains usual restrictions in relation to parks and reserves, and conditions governing export and trade in animals and trophies. The responsible Minister is empowered to make regulations for the development, conservation and management of wildlife resources and for the implementation and administration of the Act.

The Sudan is a signatory to both the African Convention on the Conservation of Nature and Natural Resources and the Convention on International Trade in Endangered Species of Wild Fauna and Flora, which both impose certain obligations on contracting States in relation to the conservation of wild life resources and protection and endangered species, Sudan should ratify these conventions.

Summary

After having reviewed the existing machinery and legislation on the basis of information available, it would be premature to evaluate the concept on the whole. It can however, be speculated, in regards to the existing machinery for the conduct of marine related activities, that Sudan shares similar constraints as its neighbours in coordination and organization Namely, that government ministries and agencies confine themselves to their own activities and do not efficiently co-operate in the event of interlinked interests

With regards to the existing marine environmental legislation, once again limited information was available to the author for discussion However, from the available information, it would be fair to suggest that comprehensive legislation is needed and should be strengthened to cover all aspects of the marine environment

TANZANIA

1 EXISTING MACHINERY FOR THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT

The various ministries and autonomous agencies which are involved in the protection and management of the marine resources and coastal environment are described below

The Establishment of the National Environment Management Council, Act GN 19 of 1983

The National Environment Management Council was enacted on 10 September, 1983, by the Parliament of the United Republic of Tanzania.

Functions of the Council

The main function of the Council shall be to advise the government on all matters relating to the environment, in particular the Council shall:

i. formulate policy on environmental management and recommend its implementations by the government;

ii coordinate the activities of all bodies concerned with the environment and serve as a channel of communication between those bodies and government;

iii evaluate existing and proposed policies and activities of the government related to pollution control and the enhancement of the environment and to the accomplishment of other objectives which effect the quality of the environment and on the basis of that, formulate policies and programmes which will achieve more effective management and enhance environmental quality;

iv recommend measures to ensure that government policies take adequate account of the environment;

v stimulate public and private participation in programmes and activities for the rational and beneficial use of the natural resources;

vi seek more scientific knowledge of changes in the environment and encourage the development of technology to prevent or minimize adverse effects that endanger man's health and well being.

vii specify standards and criteria for the protection of beneficial uses and the maintenance of the quality of the environment;

viii establish and operate a documentation and dissemination information system relating to the environment;

ix formulate legislative proposals in the area of environmental issues and recommend implementation by the government, and

x undertake or promote general environmental educational programmes for the purpose of creating national public awareness regarding the environment and the role of the public in the protection and conservation of the environment

The Tanzanian National Scientific Research Council

This Council was established by Act No. 51 of 1968. The main functions of this Council amongst others, are:

(a) to coordinate all types of scientific research carried out;

(b) to advise the government on:

i priorities in scientific research;

ii national and international matters relating to scientific research;

iii matters relating to recruitment of research personnel;

iv instruction on scientific subjects in educational institutions;

v the initiation, formulation and implementation of research policies and programmes; and

vi the establishment and maintenance of national scientific standards.

(c) to promote the documentation and dissemination of information on all research; and

(d) to collaborate with organizations in matters pertaining to scientific research. The Council may also undertake scientific research in all matters affecting the United Republic or its people

The Act was amended by Parliament in October, 1977 in order to streamline its structure

The Council has eight committees which were established in order to give scientific advice in various fields. These Committees are the.

i. Agricultural Research Committee

ii Medical Research Committee

iii. Natural Sciences and Natural Resources Research Committee

iv Building and Construction Research Committee

v Industrial Research Committee

vi Food and Nutrition Research Committee

vii Social Sciences Research Committee

viii Scientific Education and Manpower Development Committee

The Tanzanian Industrial Research and Development Organization (TIRDO) Act of 1979

This Act established an Organization whose functions include amongst others, to provide the Government and other bodies with advice and assistance on technical facilities for industrial enterprises so as to improve performance, to carry out applied research and investigations in to ways of abating and preventing pollution from industries.

The Tanzania Fisheries Research Institute Act of 1980

This Act established an Institute for the promotion and conduct of research in fisheries.

Its functions are to carry out research in various aspects of fisheries for purposes of improving techniques in fisheries development and ways of controlling and preventing marine pollution.

The Tanzania Agricultural Research Organization Act of 1980

This Act established an Organization to advise on strategies for enhancing agricultural practices, which include soil and water catchment conservation strategies and advice on strategies for retaining agricultural inputs on the farmlands to prevent pollution of waterways and eventually of the sea by fertilizers and pesticides.

The Tanzania Forestry Research Institute Act of 1980

This Act established an Institute which would contribute to soil and water catchment strategies.

The Tropical Pesticides Research Institute (TPRI) Act of 1979

This Act established an Institute which has carried out research on the impact of various pesticides on the environment.

Training and Research Institutes

i The Institute of Marine Sciences is involved in research in biological and physical oceanography and fisheries. This institute is a University research and training institute The staff gives lectures at the University main campus at undergraduate and graduate levels in zoology and marine biology

ii The Kunduchi Fisheries Research and Training Institute is oriented towards the development of the fishery industry The Institute offers a 2 year diploma level training certificate in general fisheries

iii The Mbegani Fisheries Development Centre aim is to produce highly trained fisheries technician's and technologists including master fishermen The Centre offers a specialized diploma programme in fisheries technology for 3 years

2 SURVEY AND ANALYSIS OF EXISTING LEGISLATION RELEVANT TO THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT

2 1 Limits of National Jurisdiction

Law on the United Republic of Tanzania Territorial water: Presidential Proclamation of 24 August 1973, Government Notice No. 209, published on 7 September 1973, (Cap. 596).

The United Republic of Tanzania's Territorial water extends across the sea a distance of fifty nautical miles measured from the appropriate base lines along the coasts and adjacent islands, as marked on charts numbered 1 to 6 issued by the Surveys Division of the Ministry of Lands, Settlement and Water Development, Dar-es-Salaam, on 30th March, 1967 and registered with the Secretary General of the United Nations.

Provided that in respect of the Island of Pemba where the distance between the baseline measured on Pemba and the mainland of Kenya is less than one hundred nautical miles, the territorial water of the United Republic of Tanzania extend up to the median line every point of which is equidistant from the nearest point on the baseline between Pemba and the mainland of Kenya as marked on the aforesaid charts.

Although Tanzania is a signatory to the United Nations Convention on the Law of the Sea, its law governing the extent of its territorial seas does not conform to that of the provisions under the Convention.

2 2 Legislation Relevant to Marine Pollution

2 2 1 Marine Pollution by Ships

(a) Operational Discharge by Ships

The Merchant Shipping Act No. 43 of 1967

This Act consists of 319 sections and three schedules, which provide for the control, regulation and orderly development of merchant shipping. The legislation contained, however, does not regulate inland transport.

The Merchant Shipping Act No. 21 of 1980

Under this Act, regulations made by the Minister responsible for shipping matters concerning manning of ships and competence of seamen apply to the regulation of inland transport.

The Merchant Shipping Regulations 1981 (GN 130 of 6/11/81)

These regulations elaborate on the requirements and standards of seamen's certificates and competence, and borrow provisions from the IMO 1978 International Convention on Training, Certification and Watch-Keeping. Tanzania ratified this Convention in 1983. Part IX of the Merchant Shipping Act 1961 is concerned with the pollution of the sea by oil. The Act defines 'discharge' in respect to oil or oily mixtures as discharge, escape or leak howeverso caused. 'Oil' is defined as, crude oil, fuel oil, heavy diesel oil and lubricating oil and includes coal tar and bitumen. "Oily mixture" means a mixture containing not less than 100 parts of oil in 1,000 parts of the mixture. The discharge of oil or oily mixture by any ship into a harbour or into the sea within 100 miles from the Tanzanian coast, or by any Tanzanian ship within 100 miles of any land, makes the owner or master of such ship guilty of an offence and on conviction liable to a fine not exceeding 10,000 shillings.

Although this legislation covers some aspect of pollution by ships it requires updating. In addition to some of the definitions, the whole scope of the Act should be extended to cover substances other than oil which pollute the seas, this importance is amplified in light of the recent trans boundary movement of hazardous waste. The sanctions provided in the event of oil or oily mixture discharge are also too minimal and lenient. The amount stipulated is nothing compared to the damage that can be caused by the accidental or deliberate discharge of oil or oily mixtures. Moreover the legislation does not cover the installation of special equipment in ships, special provisions on the transfer of oil, establishment of oil records and the provision of reception facilities of oil loading terminals and repair ports. Tanzania having become party to the 1954 Oil Pollution Convention (as amended) and the 1973 MARPOL Conventions will have to conform to the provisions of the conventions even though it has legislation which borrows from it. The Merchant Shipping Act, 1961, Part IX on pollution, has definitions borrowed from the Convention. Tanzania should accede to the 1954 Convention, because not only does it provide pollution guidelines but also because it may take sometime before she accedes to the 1973 Convention due to its technical requirements.

When considering ratifying the 1973 MARPOL Convention, Tanzania will have to consider the requirements especially the Regulations for Prevention of Pollution by Oil (Annex I) and Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk (Annex II), because these two annexes are compulsory under the convention These annexes include the provisions of reception facilities at oil loading terminals, repair ports and in ports where vessels have residues to discharge. Tanzania may require assistance from IMO to facilitate conformity to the requirements

(b) Accidental Discharge by Ships

i. The Prevention of Maritime Accidents

Tanzania has no specific legislation for the safety at sea However, Part V of the Merchant Shipping Act makes some provision for safety at Sea. The Minister is empowered to draw up safety regulations and issue certificates to passenger and cargo ships in accordance with the 1960 SOLAS Convention. No reference is, however, made to the 1974 SOLAS Convention. It would be in the interest of Tanzania to ratify this Convention. There are also provision for the International Regulations for Preventing Collisions at Sea, 1960 The Minister is also empowered to create regulations for the carriage of dangerous goods by ship The investigation of shipping casualties is also provided for by the Commissioner of Customs with the assistance of assessors. The Commissioner may cancel or suspend the licence of a master, mate or engineer if a shipping casualty in the result of a wrongful act or default, incompetence or any act of gross misconduct. Some regulations, however, such as those on safety under section 197, have not been promulgated.

In part V of the Act, no reference is made to the 1966 Load Line Convention and its amendment. There is therefore a need to update the Merchant Shipping Act to bring it in line with international developments

Under section 290 and 291 the legislation provides for jurisdiction over any vessel lying near or passing the Tanzanian coast and for jurisdiction in case of offences on board the ship In an event of conflict of laws, the merchant shipping legislation is to apply If, however, there are no provisions the case is to be governed by the law of the port at which the ship is registered

ii Prevention and Control of Pollution after Maritime Accidents

Legislation governing the prevention and control of maritime accidental pollution in Tanzania is very limited Tanzania should adopt legislation for the intervention in case of emergencies in its territorial waters.

Because of Tanzania's geographical location, being near major shipping routes and the lack of specific legislation on maritime casualties it may be worthwhile for Tanzania to accede to the

International Convention Relating to the Intervention on the High Seas in Cases of Oil Pollution Casualties, Brussels, 1969. This Convention is of tremendous importance to coastal states who are faced with imminent danger to their coastline or related interests from pollution or threat by oil pollution, following upon maritime casualties. Likewise the same reasoning would apply to the adoption of the Protocol Relating to Intervention on the High Seas in cases of Marine Pollution by Substances Other than Oil, London, 1973.

Tanzania should also ratify the Convention on the High Seas, Geneva, 1958, not only does it provide for freedom on the high seas but is also strict about pollution. Tanzania has proposed a 'clause' in the convention regarding flags of convenience, stating that there must be a definite link between vessel and flag.

iii Contingency Plan to Combat Accidental Pollution

At present Tanzania has no national contingency plan for dealing with oil pollution of the sea or other hazardous substances. The transport of crude oil to the TIPER Refinery in Dar-es-Salaam and refined products to Zanzibar, Pemba, Tanga and Mtwara through difficult waters poses a serious potential threat to coastal ecosystems. It is therefore most vital for Tanzania to establish a national contingency plan to deal with such an event.

iv The Liability and Compensation for Pollution Damage

In regards to this subject matter, Tanzania has no specific legislation besides a few provision in the Merchant Shipping Act Part IX which makes the owner or master of such a ship guilty of an offence, and relies on municipal courts to enforce civil liability for pollution damage. Tanzania would benefit by ratifying the conventions aimed at uniformity to international rules regarding liability and compensation for oil pollution damage, and adopt national legislation to this end. The international conventions which Tanzania would benefit from are:

- International Convention on Civil Liability for Oil Pollution Damage, 1969;
- Protocol of 1984 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969;
- International Convention on the Establishment of International Fund for Compensation for Oil Pollution Damage, 1971; and
- International Convention Relating to the Limitation of the Liability for Maritime Claims, London, 1976.

2.2.7 Pollution Resulting from Exploration/Exploitation of the Sea bed Mineral

The Petroleum Exploration and Production Act, 1980

This Act applies to Zanzibar as well as mainland Tanzania and applies to and in respect of the sea bed and sub-soil of the continental shelf

Petroleum is defined as:

i any naturally occurring hydrocarbon, whether in gaseous, liquid or solid state,

ii any naturally occurring mixture of hydrocarbons, whether in a gaseous, liquid, or solid state; or

iii any naturally occurring mixture of one or more hydrocarbons (whether in a gaseous, liquid, or solid state) and any other substance and includes any petroleum as defined in (i), (ii), and (iii) that has been returned to a natural reservoir, but does not include coal (or its extracts or other rock) Because of its importance, the control over petroleum is vested in the United Republic.

The Minister responsible for petroleum, is empowered to grant exploration and development licences. Under section 39 the Minister may require the registered holder of an exploration licence to carry out investigative studies such as physical impact studies into the possible effects of the petroleum industry on the environment. The registered holder of an exploration licence is required to

secure the safety, health and welfare of his workers,

control the flow and prevent the waste or escape in the exploration or development area of petroleum;

to prevent the pollution of any water-well, spring, stream, river, lake, reservoir, estuary, harbour or area of sea by the escape of petroleum, salt water, drilling fluid, chemical additive, gas (not being petroleum), or any other waste product or effluent, and

not to interfere whilst carrying out operations with the surface rights of fishing, navigation and any other lawful operation

The Minister may also make regulations concerning the conservation and prevention of the waste of the natural resources (whether petroleum or otherwise), the control or the flow and prevention of the escape of petroleum, water, gases (other than noxious or deleterious matter).

The Mining Act of 1979

This Act regulates the exploration of minerals on the land which includes the land beneath the territorial waters and the continental shelf Minerals are defined as

- any substance, whether in solid, liquid or gaseous form, occurring naturally in or on the earth, or in or under the seabed, formed by or subject to a geological process, but does not include petroleum as defined in the Petroleum Exploration and Production Act, 1980;

Radio active minerals are defined as:

- a mineral which contains by weight at least one twentieth of one per cent (0.05 per cent) or uranium or thorium or any combination thereof.

Mining licence applications must be accompanied by a statement of:

i. the programmes of proposed mining operations;

ii. proposals for the prevention or treatment of pollution;

iii. the safe guarding of fishing and navigation (if relevant);

iv. the progressive reclamation of the effects of mining on water areas, if relevant and adjoining lands; and proposals if relevant;

v. for the elimination of any special risks associated with the mining or treatment of radio active minerals.

Under Section 37 and 39 of the Act, no mining licence is to be granted unless the programme of proposed mining operations takes proper account of environmental and safety factors.

Mining operations are not to be carried out in national parks, forest reserves, game reserves and range development areas, except with written consent of the authority concerned. Penalties are provided in case radioactive minerals are exported without complying with the law regulating such activities. The Commissioner for Mines has power of entry to any prospecting or mining area when a nuisance exists and may direct the abatement or removal of such a nuisance. The Minister of Minerals may make Regulations for the regulation of matter relating to sanitation and health. The Act repeals the Mining Ordinance.

The exploration and exploitation of oil and sea-bed minerals in Tanzania is a relatively new activity, as such not much has been experienced in terms of pollution of the marine environment from such ventures. It is most encouraging that legislation exists for the preservation of the marine environment in advance before environmental damage occurs.

Like the petroleum legislation, the Mining Act has provisions for environmental protection. However, the Mining Act has more provisions on the protection of the environment and in view of the increasing oil prospecting, there may be a need to add provisions to the Petroleum Act which are already in the Mining Act.

2.2.3 Marine Pollution by Dumping of Wastes and Other Matter

Tanzania has not specific legislation regarding marine pollution by the dumping of wastes and other matter and views this as a problem of industrialized states The industrial states are the most likely culprits who are tempted to transfer their industrial wastes to other areas It is due to this fact that Tanzania should consider ratifying the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter. London, 1972 The Convention contains a black list of prohibited items and a grey list of substances which are not totally prohibited but the dumping of which is subject to special control. Having no specific legislation to invoke its provisions Tanzania should establish legislation to this end Nevertheless the following Act makes some scanty provisions for the protection of the environment

The Protection from Radiation Act of 1983

This Act controls the use of radioactive material and matters connected with the protection of people from harm resulting from ionizing radiation The Act provides for consultation with such bodies as the National Scientific Research Council, the Petroleum Development Corporation, the National Institute of Medical Research and others. It prohibits the use of radioactive material unless registered, however, it does not set standards In regards to the environment, the Minister is left to make regulations on the environment without special reference to the International Atomic Energy Agency which would be of great technical assistance.

2.2.4 Marine Pollution from Land-Based Sources

Town and Country Planning Ordinance (cap. 378)

Section 18. The Minister may make regulations for the better execution of the provisions and purposes of Cap 378.

Town and Country Planning Regulations (GN 504 of 1960)

Under this Regulation, all uses of buildings and uses of land are classified under groups e.g. dwelling houses, residential buildings, shops, public buildings and places of assembly and industrial. In the last category, small scale industries, craftsman trades and special industries are classified Special industries which may cause pollution by reason of smell, noise or fumes, or dangerous by reason of the use and storage of dangerous inflammable materials or inimical to public health owing to vermin or other causes are classified in a special group, as well as industries that produce or treat noxious, offensive or explosive chemicals, gases or other compounds thereof The bulk storage or petroleum products and inflammable fuel oils or explosive gases is also included in this group. This order is repeated in the Town and Country Planning (Development and Zoning), (Capital Development Area) Regulations (GN NO 14 of 1980) in respect of the new capital, Dodoma Of specific interest to the environment under this order is the requirement that, when considering an application for a planning consent, the Special Committee (under Cap 378) may impose conditions regulating and controlling the deposit

and disposal of waste from any industrial process, whether by burning or by effluent through rivers, lakes or other watercourse, natural or otherwise, or by vehicular traffic.

The Townships Ordinance (Cap 101)

The Townships Rules give power to a Health Officer to investigate the existence of any nuisance, which is defined in Rule 11, the search for mosquitoes, destroying of sanitary premises and to prevent the deposit of refuse on streets and the pollution of water which is also an offence Section 56 of the Township (Building) Rules provides for drainage facilities (waste water pipes and public toilets). The Public Health (Sewage and Drainage) Ordinance, Cap 336, is the principal legislation dealing with the matter

The Township legislation needs updating. Dumping sites have overspilled into rivers and refuse finding its way to the ocean.

The Water Utilization (Control and Regulation) Act of 1974

This Act confers powers to, the Control Water and Basin Water Boards to grant water rights in the country. Under section 33(4) of the Act, any person who pollutes the water in any river stream or watercourse or in any body or surface to such an extent as to be likely to cause injury directly or indirectly to public health, livestock, fish crops, etc . shall be guilty of an offence.

The Water Utilization (Control and Regulation) (Amendment) Act of 1981

This Act is of more interest to the environment. Pollutant in this Amendment means any substance or characteristic, whether or not harmful, added or imposed on to natural or supplied waters

Amongst others, the function of the Central Water Board is to control and regulate water pollution. The Central Water Board has the power to carry out and promote research and investigations into the causes of and ways for efficient prevention or control of water pollution.

More specifically The Central Water Board has the power to

i carry out and promote research and investigations into the cause of and ways for efficient prevention or control of water pollution,

ii formulate and recommend to the Government, plans for the regulation of the discharge of effluents by industrial, trade and other water users,

iii recommend to the Minister a uniform comprehensive procedure for sampling and examining water, sewage and industrial effluents; and

iv advise and assist the Government, public authorities, and others, by proposing measures for the more efficient control or prevention of water pollution.

This amended Act prohibits the discharge of effluents from any commercial, industrial or other trade waste systems into receiving waters without the consent of a Water Officer. The conditions of schedule I to every water right are the treatment and modifying of effluents to the prescribed effluent and receiving water standards before discharge.

This Act as amended is most comprehensive in the regulation and control of water supply and pollution. The legislation does not require revision but rather implementation.

The Rufiji Basin Development Authority (Rubada) Act of 1975

This Act regulates the generation of hydroelectric power, flood control, agricultural activities, forestry, fishing and tourism promotion. The Minister for Economic Affairs and Development Planning is empowered to adopt regulations to minimize pollution of any river, lake or dam within the Development Area However, no such legislation has been adopted.

It is most important that Tanzania's legislation on the pollution of land-based sources is comprehensive, taking into account that land-based sources of pollution are the biggest contributor to marine pollution.

2.4 Legislation Relevant to Coastal Areas Management and Development

Tanzania has no specific legislation on this subject matter, although the establishment of the National Environment Management Council makes provisions for coastal areas management and development.

The Establishment of the National Environment Management Council, At GN 19 or 1983

The National Environment Management Council was enacted on 10 September, 1983, by the Parliament of the United Republic of Tanzania.

Functions of the Council

The main function of the Council shall be to advise the government on all matters relating to the environment, in particular the Council shall:

i formulate policy on environmental management and recommend its implementation by the government;

ii coordinate the activities of all bodies concerned with the environment and serve as a channel of communication between those bodies and government;

iii evaluate existing and proposed policies and activities of the government related to pollution control and the enhancement of the environment and to the accomplishment of other objectives which affect the quality of the environment and on the basis of that, formulate policies and programmes which will achieve more effective management and enhance environmental quality,

iv recommend measures to ensure that government policies take adequate account of the environment,

v stimulate public and private participation in programmes and activities for the rational and beneficial use of the natural resources,

vi seek more scientific knowledge of changes in the environment and encourage the development of technology to prevent or minimize adverse effects that endanger man's health and well-being;

vii specify standards and criteria for the protection of beneficial uses and the maintenance of the quality of the environment;

viii establish and operate a documentation and dissemination information system relating to the environment;

ix formulate legislative proposals in the area of environmental issues and recommend implementation by the government. and

x undertake or promote general environmental educational programmes for the purpose of creating national public awareness regarding the environment and the role of the public in the protection and conservation of the environment.

The Public Land Decree (Cap 93) Removal of Natural Products Rules (1984)

Section 610 This Decree specifies natural products as being stones, sand, gravel, lime and any other natural produce of the same groups This Decree may be applicable directly to coastal management since it rules that no person may excavate, remove, transport or sell any natural produce from public land without permit, while specifying hours during which a person may excavate or transport It also gives powers to the Minister to declare such areas of land or sea shores surrounding the islands of Zanzibar and Pemba to be protected areas, where a prohibited area, means, any area declared by the Minister to be closed for any act vities of an excavation or removal of natural produce

Tanzania having established the machinery required amongst others for coastal areas management and development should enact specific legislation to this end

2.4 Legislation Relevant to Marine Living Resources

2.4.1 Fisheries Legislation

Fisheries Act of 1960

Part II Officers

Article 3 The President shall appoint a Chief Fisheries Officer The Minister may appoint such number of fisheries officers as may be necessary for the purpose of the administration of this Act

Part III Development and Control of the Fishing Industry

Article 4. The Minister may, by order published in the Gazette, provide that no person shall engage in:

i. fishing;

ii collecting, gathering or manufacturing fish products or products of aquatic flora,

iii selling or marketing of fish, fish products, aquatic flora or products or aquatic flora; and

iv. importing or exporting of fish, fish products, aquatic flora or products of aquatic flora;

except under a licence issued by the Chief Fisheries Officer or any other authorized officer Any order may be made to apply to all fish, fish products, aquatic flora or products of aquatic flora or to any species or kind of fish, fish product, aquatic flora or product of aquatic flora

Any order made under this section may:

i. prescribe fees for licences;

ii. prescribe terms and conditions of licences;

iii prescribe penalties for any contravention of the order or any breach of any term or condition of a licence, provided that any penalty so prescribed shall not exceed the general penalty prescribed by section 8 and

iv. provide and impose such exceptions, reservations and conditions as the Minister may think fit

Article 5. The Minister may, by order published in the Gazette, declare any area or waters to be a controlled area in relation to all fish, fish products or aquatic flora, or in relation to any species or kind of fish, fish product or aquatic flora

Where any area or any portion of territorial waters is declared to be a controlled area, no person shall, save with the authority in writing of the Chief Fisheries Officer or any authorized officer, engage in or do any fishing in such area or waters

Where any area or any portion of territorial waters is declared to be a controlled area, no person shall, save with the authority in writing of the Chief Fisheries Officer or any authorized officer, engage in or do any fishing in such area or waters

Article 6. Preference to be given to citizens. Where an order is made under section 4 or section 5, the Chief Fisheries Officer or any authorized officer shall not, save with the consent in writing of the Minister, grant any licence or authority, as the case may be, to any person who is not a citizen of the United Republic, or, in the case of a body corporate, to any body corporate which is not incorporated by or under any written law.

Part IV - Regulations

Article 7: The Minister may make regulations and provisions which are necessary for the purpose of protecting, conserving, developing, regulating or controlling the capture, collection, gathering, manufacture, storage or marketing of fish, fish products, aquatic flora or products of aquatic flora

The Minister may make regulations:

(a) providing for the issue, suspension and cancellation of licences or authorities granted or given under this Act or any subsidiary legislation made hereunder

(b) prescribing the terms and conditions upon which any such licence or authority may be granted or given;

(c) prescribing the forms of application for licences or authorities and also forms of licences and authorities;

(d) prescribing fees for licences and authorities;

(e) requiring all or any category of fishing vessels to be registered;

(f) providing for and regulating the description, specifications and form of nets to be used in fishing and the size of the meshes thereof.

(g) prohibiting or regulating the use of any description of fishing gear.

(h) prohibiting, restricting or regulating the bringing into Tanganyika of any live fish, other than fish indigenous to Tanganyika;

(i) prohibiting or regulating the sale of any fish, aquatic flora or any fish product or product of aquatic flora;

(j) prohibiting or restricting the use of explosives for the purpose of fishing.

(k) prohibiting or restricting the use of any poisonous or toxic substance for the purpose of fishing;

(l) prohibiting or restricting the capturing, collection, gathering, killing or injuring of immature fish;

(m) prohibiting or restricting the collection, removal or destruction of any variety of fish, aquatic flora, fish product or product of aquatic flora;

(n) providing for the protection of spawning areas;

(o) preventing the obstruction and pollution of territorial waters;

(p) controlling the import and export of fish, aquatic flora, fish products or products of aquatic flora;

(q) determining and imposing close periods;

(r) limiting or controlling the number and size of fishing vessels;

(s) regulating the marketing of fish, aquatic flora, fish products or products of aquatic flora;

(t) prohibiting, regulating or controlling the activities of foreign fishing vessels within territorial waters;

(u) regulating the manufacture of fish products or products of aquatic flora;

(v) prescribing conditions which every manufacturer of fish products or products of aquatic flora shall comply with;

(w) prescribing specifications to which any factory, building or other premises used for the purposes of manufacture, storage or sale of any fish, fish product, aquatic flora or product of aquatic flora shall conform;

(x) establishing marine parks, sanctuaries or reserves for any purpose whatsoever;

(y) controlling and regulating construction, installation, size and specifications of fishing weirs.

Regulations made under this section may be expressed to apply:

i. to all fish, aquatic flora, fish products or products of aquatic flora, or to any species or kind of fish, aquatic flora, fish product or product of aquatic flora;

ii. to all persons or to any class of persons specified in the regulations;

iii. to all areas or to any area or areas specified in the regulations.

Part V Offences

Article 8. Penalty for offences. Where regulations made under section 7 provide that the contravention of any regulation shall be an offence, the Minister may provide in respect of such offence a penalty of a fine not exceeding twenty thousand shillings or of a term of imprisonment not exceeding five years, or of both such fine and imprisonment.

Where any subsidiary legislation made under this Act make no specific provision for penalty for any offence under such subsidiary legislation, any person guilty of the offence shall, upon conviction, be liable to a fine not exceeding ten thousand shillings or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment.

Article 9. Power of search and seizure. The Chief Fisheries Officer, an authorized officer or a police officer of or above the rank of Inspector may, without warrant.

i. board and search any vessel, vehicle or any part thereof;

ii enter any premises, building, land or other place whatsoever;

iii seize, remove and retain any fish, aquatic flora, fish product, product of aquatic flora, fishing gear or any other article or thing whatsoever, whether found on board any vessel or vehicle or in any building, place or premises, and in respect of which it appears to him that any offence under this Act or any subsidiary legislation made hereunder has been committed, or which appears to him to constitute evidence of any such offence having been committed,

iv arrest any person whom he reasonably suspects of having committed any offence under this Act or any subsidiary legislation made hereunder or of being about to commit any such offence.

The Chief Fisheries Officer or any authorized officer, or any police officer of or above the rank of Inspector may enter and search without warrant any factory, premises or place used or reasonably suspected of being used, either wholly or in part, for the manufacture of any fish product or any product of aquatic flora product of aquatic flora or for storage of fish, aquatic flora, fish product, or product of aquatic flora or for storage of fish, aquatic flora, fish product, or product of aquatic flora in respect to which he has reason to believe an offence under this Act or under any subsidiary legislation made hereunder has been committed or is about to be committed

Article 12 Forteiture of vessel or vehicle. Where, upon conviction for an offence under this Act or any subsidiary legislation made hereunder, the court is satisfied that any vessel or vehicle was used in the commission of the offence, the court may order such vessel or vehicle to be forfeited to the United Republic

Provided that no order under this section shall be made if the owner of such vessel or vehicle satisfies the court that the vessel or vehicle was so used without his knowledge or consent

Part VI Miscellaneous Provisions

Article 14. Exemptions. The Minister may, if in his opinion it is in the public interest so to do, exempt any person or organization from all or any of the provisions of this Act or of any subsidiary legislation made hereunder.

The Chief Fisheries Officer may, in the interests of science or research, exempt by licence any person or organization from all or any of the provisions of this Act or any subsidiary legislation made hereunder subject to such terms and such conditions and for such period as may be specified in such licence

Part II - Registration of Fishing Vessels

Article 3. Application. Every vessel to which the provisions of this Part of these Regulations apply shall be registered in accordance with, and be subject to the provisions of the Act and these Regulations

This Part of these Regulations shall apply to every vessel, other than dug-out canoes, howsoever called or described, used for fishing purposes

No person shall use for fishing purposes any vessel, which is required to be registered under these Regulations, unless such a vessel has been duly registered.

Article 4. Register. Every licencing authority shall keep a register for the registration of fishing vessels.

Article 6. Entry in register. On receipt of an application and the prescribed fee, the licencing authority may, subject to these Regulations, register the vessel and shall issue a certificate of registration in the appropriate form prescribed in the First Schedule (Form 2).

Every vessel registered under the provisions of these Regulations shall be marked permanently and conspicuously to the satisfaction of the licencing authority as follows:

(a) her name (in any) and identification mark shall be marked on each of her bows upon a plain background or distinct contrast thereto, that is to say, shall be in dark characters on a light background or in light characters on a dark background;

(b) each letter and figure thereof shall be not less than 25 cm high, and the contours shall be not less than 4 cm. broad

No identification marks other than those prescribed shall be marked on any registered vessel

Article 9 Central registry of vessels. There shall be established a central registry of vessels registered under these Regulations

The Director of Fisheries may appoint an authorized Officer to be the Central registrar of vessels.

Part III Licencing of Fishing Vessels, Fishermen and Fish Dealers

Licencing of Fishing Vessels

Article 11 Classes of vessels and issue of licences. Fishing vessels shall be classified for licencing purposes in the classes enumerated in Part (a) of the Third Schedule and the several fees payable for such licences shall be those stated in the said Part (a) of the Third Schedule against each class and upon payment of the said fees and subject to compliance with the provisions of the Act and of these Regulations licencing authorities may issue licences which shall be in the appropriate form prescribed in the First Schedule

Prohibition against use of vessel without licences - No person shall use for fishing purposes any vessel of a class specified in Part (a) of the Third Schedule, unless there is a valid licence in respect of such vessel issued in accordance with these Regulations.

Power to order inspection of vessel before licencing for the purposes of ascertaining whether or not a vessel complies with the provisions of the Act or of these Regulations, a licencing authority may direct that before any vessel is licenced under this Part of these Regulations, the owner or the person applying for licencing shall produce the vessel for inspection by the licencing authority or an authorized officer

Article 12 Vessels to be provided with necessaries.

(1) No fishing vessel licenced under these Regulations shall proceed on a fishing voyage unless it is seaworthy and there is placed on the vessel:

i. sufficient quantity of food and a number of utensils for holding water and food;

ii. a serviceable horn or trumpet

(2) Where an authorized officer, upon inspection of any licenced fishing vessel which is being prepared to proceed on a fishing voyage, considers that the vessel is un seaworthy or unfit to proceed to sea or to make any fishing voyage without serious danger to life, that the food or water for the use of the crew are of bad quality, he may detain the vessel until he is satisfied that she is a safe vessel or that proper food or water are provided in lieu of those which have been condemned.

(3) Where any vessel is detained under paragraph (2), an authorized officer may, before releasing her, require the owner or master to rectify any defects found to exist

(4) Any person who contravenes the provisions of paragraph (1) or fails or refuses to comply with any requirement under paragraph (3) of this regulation shall be guilty of an offence against these Regulations

Licencing of Fishermen and Fish Dealers

Article 13. No person to engage in certain types of fishing or export of fish or fish product unless licenced. (1) No person shall engage in fishing or export of any of the types of fish or fish products enumerated in Part (b) of the Third Schedule unless he is the holder of a valid licence permitting him to engage in fishing or export of the type of fish or fish product specified on the licence

(2) No person shall employ, cause or permit any person to engage in fishing or export of any type of fish or fish product which such first mentioned person is prohibited from fishing or export by the provision of paragraph (1) of this regulation.

(3) The several fees stated against each type of fish or fish product specified in Part (b) of the Third Schedule shall be payable for licences for fishing or export of those types of fish or fish product.

(4) i. No person shall by way of trade, buy, sell or otherwise deal in fish or fish products unless a valid licence issued by Ministry of Trade is issued to him or is exempted from such licence in respect of his trade in fish or fish products under these regulations.

ii Fees for the licence are shown in the 3rd Schedule of these regulations and the exempted group includes the fishermen with valid fishing licences who may sell or otherwise deal in fish for fish products throughout the United Republic in Tearooms, Restaurants, Hotels or Ships and at fish receiving stations

iii Fish hawking is prohibited and instead all hawkers should sell their fish or fish products in fish markets or prescribed places and shall have valid licences issued by the Ministry of Trade

iv No person other than licenced fishermen or fish dealer shall possess fish or fish products specified in 3rd Schedule of these Regulations without a certificate of ownership specified in the third Schedule to these Regulations.

General Provisions Relating to Licences

Article 14: Register of licences. Every licencing authority shall keep and maintain a register in respect of each type of licence issued under these Regulations.

Article 15. Power to refuse or suspend licences. A licencing authority may, in his discretion, refuse to issue a licence or may suspend any licence already issued under these Regulations for such period as he may specify:

Provided that where the licencing authority is other than the Director of Fisheries, he shall report every case of suspension to the Director who may confirm, vary or reserve the decision of the licencing authority.

Article 16. Power to cancel licences in certain cases. The Director of Fisheries may cancel or revoke any licence, permit or authority issued or granted under these Regulations on either of the following grounds

i that the holder has been convicted of an offence against the Act or any Regulations made thereunder or has violated or failed to comply with any of the conditions or restrictions attached to or imposed on the licence, permit or authority; and

ii that the holder has been convicted of an offence involving dishonestly or fraud.

Article 17. Duration of licence. (1) Every licence issued under these Regulations other than:

(a) sport fishing licence referred to in paragraph (2) of this regulation;

(b) a Special Licence issued by the Director of Fisheries under regulation 20,

unless previously cancelled shall remain in force until the 31st of December next following the date on which it is issued.

(2) A Sport Fishing Licence may be issued for one fortnight or for one month or for one year, and such licence shall, unless previously cancelled, continue in force

i. in the case of a fortnightly licence, for a period of fourteen days from the date of issue;

ii in the case of a monthly licence, for a period of thirty days from the date of issued; and

iii in the case of a yearly licence, for a period of one year from the date of issue

(3) Licence not transferable A licence issued under these Regulations shall not be transferable

Article 18. Power of Director of Fisheries to attach conditions to licences. The Director of Fisheries may attach to any licence issued under these Regulations any conditions which in his opinion are necessary or expedient for the carrying into effect he objects and purposes of the Act and of these Regulations so long as those conditions are not inconsistent with the provisions of the Act or Regulations made thereunder

i. the methods used in fishing and disposal of fish or particular species of fish and the use of any equipment, appliance, instrument, net, fishing weir, dams or any other means whatsoever,

ii close periods for fishing and disposal of fish or particular species of fish,

iii the number of persons to be engaged, the number of boats, nets, fishing weir, dams or any pieces of equipment, appliance or instruments to be employed for any purpose in relation to fishing

iv the minimum length or size of any species of fish which may be captured or killed;

v the manner in which any fish or species of fish or any fish products shall be graded, cured, processed, preserved, marked or marketed;

vi the preparation, purchase, sale or disposal of fish or fish products including offal.

Article 19: Director may call for records and returns. Every licensee shall furnish to an authorized officer such records pertaining to fish, species of fish or fish products captured, killed, processed, preserved, packed, bought, sold, imported, exported or otherwise acquired or disposed of as the Director of Fisheries may be general or special order direct

Every licensee shall submit to an authorized officer such periodic returns as the Director of Fisheries may by general or special order direct

Article 20: Special licence. Notwithstanding anything contained in these regulations, the Director of Fisheries may grant to any person, without fee, a licence to be called a Special Licence, which shall entitle the holder to engage in fishing and to do such other things as may be specified therein for any of the following purposes:

- scientific research and museums;

- complimentary purposes;

- educational purposes;

- the supply of food in cases of emergency where no other adequate food supply is available.

A Special Licence may authorize fishing in any waters and fishing of any kind of species of fish, provided that a Special Licence issued for complimentary purposes shall not authorize the fishing of any kind of fish declared to be protected fish under any regulations made under the Act or fishing in any marine reserve.

Part IV - General Provisions Relating to Prohibitions, Restrictions and Exemptions

Article 23: Restrictions on import and export of fish and introduction of new species. No person shall without obtaining a written permit or other authorization from the Director of Fisheries and except in accordance with the conditions specified

i. import any live fish or fish products into Tanganyika other than fish indigenous to Tanganyika;

ii introduce into any water in Tanganyika blue gill sunfish (Helioperca macrochira) carp all species of cyprinus including goldfish or any species of fish not indigenous to Tanganyika or the eggs thereof,

iii transfer any species of fish not indigenous to Tanganyika or the eggs thereof from one water to another within Tanganyika; or

iv export any live fish or fish products from Tanganyika.

In addition the Director of Fisheries may order the seizure or destruction of any fish in respect of which the offence has been committed

Article 24. Control of disease in fish. Where in the opinion of any authorized officer any fish in any waters are infected with any epidemic disease, he may give notice in writing to the owner of the water or of fishing rights therein requiring the destruction of all fish or the taking of such other measures as the authorized officer may specify in the notice.

Article 25. Prohibition of use of explosives etc., and damaging of dams. No person shall:

i use or be in possession of any explosive, electrical device or any poisonous or noxious substance, with intent thereby to capture, kill or injure fish in any waters, or to render any such fish to capture,

ii cut through, break down or destroy any dam in any water with intent to capture, kill or injure fish.

Article 26. Prohibition of disturbance of spawn. No person shall wilfully disturb any spawn or spawning fish or any bed, bank or shallow in which there is spawn or spawning fish, provided that nothing in this regulation shall effect any legal right to take any material or water from any waters

Article 27. Prohibition of throwing overboard of certain substances No person shall throw overboard ballast, coal ashes, stones or other prejudicial or deleterious substances in any lake, river, harbour or roadstead, or any other water where fishing is carried on.

Article 28. Prohibition of effluents and other deleterious substances. No person shall cause or knowingly permit to flow or pass into, or put or knowingly permit to be put in any waters lime, chemical substances or drugs, poisonous matter, dead or decaying fish, or remnants thereof, mill rubbish or saw dust or any other deleterious substance or thing to such an extent as to be injurious to fish or to the spawning grounds, spawn or food of fish

The Minister may by order declare any substance to be deleterious for the purpose of this regulation.

Article 29. Exemptions from certain prohibitions. Notwithstanding anything contained in these regulations, a person shall not be guilty of an offence against any of the provisions of regulation 25, 26, 27 or 28 by reason only of any act done in exercise of any legal right, or in continuance of any process or method which he has been lawfully employing from before the commencement of these Regulations, if he proves to the satisfaction of the court that he had used all available and practicable means to render any substance, matter or thing used by him harmless to fish or to the spawning grounds, spawn or food of fish.

Article 30. Restrictions on entry of foreign vessels in territorial waters No foreign vessel shall enter the territorial waters for any purpose unless such entry is authorized by or under:

i the Act or regulations made thereunder;

ii any other written law; or

iii any treaty or international convention to which the United Republic of Tanzania is a party.

Article 31: Restriction on fishing in territorial waters. In the territorial waters no person on board a foreign vessel, including members of her crew and persons attached or employed on such vessel, shall:

i. fish or prepare to fish;

ii. unload, land or tranship any fish, outfit, or supplies,

iii. ship or discharge any persons;

iv purchase or obtain bait or any supplies or outfits; or

v take or prepare any aquatic flora.

unless he is authorized to do so by or under the Act or regulations, any other written law or any treaty or international convention to which the United Republic of Tanzania is a party.

Article 32: Prohibition of exposing fishing gear in territorial waters. Every foreign fishing vessel that enters the territorial waters shall fly its national flag and ensure that its registration mark is clearly visible, and it shall clear its decks of fishing gear which shall be stowed in such manner as to preclude its use.

Article 33: Prohibition of transporting fish into territorial waters. No person, being on board a Tanzanian fishing vessel shall bring into the territorial waters any fish received outside such waters from a foreign vessel, unless he is authorized to do so by the provisions of the Act or regulations

Article 34. Restriction on possession of fish in prohibited places. At any place where fishing or fishing for any type of fish is prohibited no person shall have in his possession any fishing gear, fish for, buy, sell or have in his possession any fish or such types of fish, the fishing of which is prohibited, or any product thereof, without lawful excuse

Article 35: Fishing gear not to obstruct navigation. No person shall set or use seine nets, gill nets or other fishing gear in such place or manner as to obstruct navigation

Article 36. Fishing gear not to be damaged. No person shall by conducting or navigating any boat or vessel or in manner to destroy net, gill net or other fishing gear lawfully set.

Article 37. Shakes, weirs, etc., to be removed. Every person who uses stakes, weirs, posts, bouys or other materials for the purposes of fishing shall remove the same from the waters within forty-eight hours of having ceased to use them, and in all cases at the expiry of the fishing season

Article 38: Main channel not to be obstructed. Except where the Director of Fisheries having regard to any special circumstances by writing permits otherwise, a fishing gear shall be so set or used as to leave clear, navigational and unobstructed at least one third of the whole breadth of the river or stream, main channel at low tide or tidal stream, to which the gear is set.

Article 39. nets or weirs not to obstruct the passage of fish. No person shall erect, construct, use or maintain in the territorial waters any net or weir or other fishing gear which unduly obstructs the passage of fish An authorized officer may order removal of or cause to be removed any such net, weir or other fishing gear.

Article 40: Prohibition of use of certain sizes of seins and other types of nets, rockets, explosives, harpoons and spear guns. Notwithstanding anything contained in these Regulations, no person shall use tor fishing

- monofilament nets in all Fresh Water Fisheries; or
- harpoon guns, spear guns.

ZANZIBAR

Fisheries Legislation

At present, Zanzibar Fisheries are legislated by the Fisheries Protection Decree, 1948, CAP 125), as amended by the Fish Protection Amendment Decree, 1964 (P D. No 18).

The decree empowers the Minister to make rules for the more efficient control, protection and improvement of fish, and the government and management of any declared area in which fishing may be carried on. It also includes the following powers of the Minister and fisheries officers:

- to impose and prescribe the condition for the regulation of fishing;

- to register all boats, nets, stakes employed in fishing;

- to register all transactions relating to the sale and the dealing in nets,

- to determine the times and seasons at which the taking of any species of fish shall commence and cease;

- to issue licences and certificates of registration to persons authorized to take any species of fish;

- to prescribe the fees payable in respect of any licence or registration issued;

- to provide for and regulate the description and form of nets to be used in fishing and to prohibit any special description of nets or meshes or tackle, instrument or appliance whatsoever tending to impede the lawful taking of fish or being in any manner detrimental to the preservation or increase of fish; and

- to prohibit or regulate the sale of any fish.

There are also rules that regulate the importation of live fish and a prohibition on the use of beach seines (Fish Protection, Importation Restriction Rules, 1951) (N95), and the Fish Protection (Seine Net Fishing) Prohibition Rules, 1914.

2 4.2 Endangered Species

Tanzania has limited legislation on this subject matter besides the following:

The Wildlife Conservation Act (No. 12 or 1974) which repealed and replaced the Fauna Conservation Ordinance, the Water Utilization Act (No. 42 or 1974), the Land Ordinance (Cap 113), the Town and Country Planning Ordinance (Cap 378) and the Range Development and Management Act (No 51 of 1964)

The Wildlife Conservation Act empowers the Minister of Natural Resources to declare any area to be a game controlled area.

Tanzania became a party to and ratified the African Convention on the Conservation of Nature and Natural Resources, Algiers, 1968, in 1974 The Convention's aims are to ensure the conservation, utilization and development of soil, water, flora, and faunal resources in accordance with scientific and with regard to the best interests of the people. Tanzania has no comprehensive legislation regarding the Convention itself, although the Wildlife Conservation Act covers topics in article II.

In 1980 Tanzania became party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington, 1973.

Tanzania has no specific legislation modelled on the Convention besides the Wildlife Conservation Act which empowers the Minister of Natural Resources to declare any area a game controlled area

Furthermore, Tanzania should ratify the Eastern African Action Plan and its Protocols The Protocol concerning Protected Areas Wild Fauna and Flora specify that the contracting parties shall take all appropriate measures to ensure the protection of wild species listed in annexes of the Protocol

Zanzibar has also formulated and enacted the Wild Animals Protection Decree (CAP 128 , which applies to any animal listed on the schedule and which includes the Hawkshill Turtle (Eretmockelys imbricata). The Wild Birds Protection decree (CAP 129), which protects listed birds throughout Zanzibar and provides for sanctuaries. Sanctuaries have been declared on the shore at Chwaka and Zanzibar Town (Wild Birds Protection sanctuaries Order (G N #53, of 1944) Other legislation currently in force affecting the coastal zone and marine resources includes:

The Woodcutting (Amendment) Decree of 1968 , Presidential Decree #4, of 1968

This Decree provides restrictions on woodcutting on government land and includes the cutting of mangroves It specifies that cutting on government land can only be carried out on receipt of a proper licence and the payment of a specified fee

7 4 3 Protected Areas and Reserves

Tanzania has some provisions relating to marine and coastal protected areas

The Fisheries (Marine Reserves) Regulations, 1975, GN 137 of 1975

i The areas described in this schedule of these regulations are declared marine reserves.

ii No person unless authorized by the director shall fish in a marine reserve

iii. No person shall enter or reside in a marine reserve without the prior consent in writing of the director. This Regulation shall not apply in relation to:

- a public officer on duty within the marine reserve or a member of his family or domestic employee;
- a person who resides at any place within the boundaries of a marine reserve;
- any person engaged in work being lawfully carried out within the boundaries of a marine reserve; and
- any person who is a "bona fide" tourist or visitor.

iv. No person shall collect any fish or other marine organism within a marine reserve.

v. No person shall cut, carve, injure, mutilate, remove, displace or break off any undergrowth or formation or other flora within a marine reserve.

vi. No person shall dig any hole within a marine reserve or in any other way impair any natural habitat or underwater scene within reserves.

vii. No person shall swim, wade, dive or use any diving equipment within a marine reserve, except for any purpose connected with scientific studies or if otherwise specifically authorized by the director.

viii. No person shall destroy, mark, deface, displace, remove or tamper with any sign, float or placard within the boundaries of a marine reserve.

ix. No person shall within the boundaries of a marine reserve carry on, or permit, or cause to be carried on any operation involving dredging, excavating, drilling or filling of any kind, or use a permit, or cause to be used any equipment, machinery or equipment normally used for dredging, drilling or excavating or deposit construct or install any such machinery or equipment.

x. No person shall within a marine reserve operate, anchor, cast or draft any vessel, water craft, mooring device in such manner as would likely strike, injure or otherwise cause damage to any marine life or underwater feature.

xi. No person shall within a marine reserve use or have in his possession any type of fishing equipment save with the permission in writing of a fisheries officer in charge of such a reserve.

xii. Any person who contravenes any provision of these Regulations shall be guilty of an offence and shall be liable a conviction of a fine not exceeding twenty thousand shillings or imprisonment for a term not exceeding five years.

The Forest Reserves Principal legislation (Cap 120), and the Woodcutting (Protection and Control of the Chwaka Mangrove Forests) Rules (GN. 99 of 1946) (Cap 1210)

Provides in the former for the Minister to declare any area of government land a forest reserve with a notice of intent being published in the gazette giving the limits of the land. Under this legislation, Zanzibar has declared eight forest reserves.

The rules concerning the mangrove forests of Chwaka Bay specify that no person can cut poles (mangrove poles) from the reserve area except by permit, while exempting these having traditional rights, The legislation also names areas promulgated as Mangrove Forest Reserves.

Summary

A great deal of environmental legislation exist in Tanzania and in light of the establishment of the National Environment Management Council the present legislation can be consolidated to avoid existing gaps. Some of the out-dated legislation will have to be repealed and amended.

Tanzania should take a number of measures in respect to the protection, management and control of its marine resources. In regards to the prevention and control of marine pollution by oil, Tanzania should consider ratifying international conventions, and establish national legislation to this end. Tanzania has not adopted sufficient and specific national legislation. Part IX of the Merchant Shipping Act deals mainly with deliberate discharge from merchant ships, however, this is inadequate in that it only deals with deliberate discharges in areas of national jurisdiction. Another point proceeds from the fact that Tanzania's national jurisdiction are not in conformity with the provisions of the United Nations Convention on the Law of the Sea. The 1973 Proclamation extends the territorial waters to 50 nautical miles without prescribing the legal regime and regulations. Tanzania having signed the Convention should conform to the provisions of a 12 nautical mile territorial sea followed by a 200 nautical mile EEZ, and adopt legislation to prevent and control oil pollution affecting its coastal waters. They should therefore develop national oil pollution combating strategies and ratify Regional Action Plans, which deal not only with the control and prevention of oil pollution but also with the conservation, management and utilization of the marine resources, namely, the Eastern African Action Plan and its Protocols.

In regards to living resources, the Fisheries Act of 1970 and the Fisheries (General) Regulation of 1973 seem adequate to deal with the management and conservation of their living resources and related problems they face. The problem lies in the enforcement of law and not the law itself. The Fishery legislation, however, does not cover the questions such as, fishermen's loan schemes and marketing systems. Enforcement of existing legislations might prove more easier if assistance were given to the fishing communities to develop appropriate fishing gears and boats as well as the marketing of their fish in order to reduce desperate measures such as the use of explosives for fishing purposes.

4. CONSTRAINTS

The adoption of the United Nations Convention on the Law of the Sea has brought approximately 35 per cent of the ocean waters within the national jurisdiction of coastal States. The Convention establishes a framework for national development, management and conservation of the marine resources, and provides for the optimum exploitation of living resources (fisheries), non-living resources (mineral resources), the prevention of pollution and the promotion of technology transfer. On the international level the Sea-Bed Authority will enable these States to benefit financially and economically from the exploitation of the sea-bed.

The exploitation of these living and non-living marine resources would contribute enormously to the social-economic development of these States. Most important of all, it would provide a most needed protein source as well as supply inputs for indigenous industries, such as traditional preservation of fish, and generate the growth of local industries (eg. boat building, net manufacturing) thereby promoting import substitution, create employment, and generate export earnings.

However, the existing capabilities of these States to explore, exploit, develop, conserve and manage their marine resources are limited at the present time. With respect to the living resources of the sea, these coastal States are not yet able to exploit their resources to an optimum degree to fully benefit their people. Even though some of the countries have fairly well developed fishing industries it is more often than not that they have very substantial foreign participation with little benefits both material and technologically accruing to the coastal States. The major constraints these coastal States endure with respect to fisheries development are, the lack of finance, legislative framework, trained skilled manpower at scientific, technical and managerial levels to advise, coordinate and run fisheries enterprises; the lack of knowledge and statistical data on their fishery resources; the lack of financial and material means for the efficient exploitation, of these measures, insufficient and inadequate harbour, boat building, and fishing equipment, repair facilities and of storage, processing, marketing and distribution infrastructure.

The exploitation of these coastal States of the non-living resources, which are mainly hydrocarbons, is very limited, and foreign participation plays a major part in whatever exploration and exploitation of petroleum and gas resources that take place. As a result these coastal States are totally dependent on foreign assistance and participation in the exploration and exploitation of their non-living resources. These States, therefore acquire very little technical and managerial capabilities of their own. The major difficulties these coastal States face is the limitation of skilled trained manpower, lack of adequate and appropriate legislation, the lack of statistical data, knowledge of the quality, quantity and location of their mineral resources, and the absence of functional co-operation among the neighbouring States, to reduce if not overcome these problems.

In order to derive the maximum benefit from their resources, remedial action at the national level and among the States would be proposed.

5. CONCLUSION

Over the last decade many African countries have begun to reform their administration and legislation for controlling water pollution. However, despite this recent trend in reform, many countries still lack effective water-quality management administrations authoritative enough to represent and bring together the interest of health, tourism, recreation, pollution and fisheries in the light of industrial and urban expansion. Even in countries which have introduced the most far-reaching reforms, the need for further organizational reforms to strengthen the authority of pollution control bodies over public and private polluters still exist. The fact that until recently freshwater pollution constituted the major problem rather than off-shore pollution, is still reflected in some countries in their treatment of estuarine and territorial waters merely as an extension of inland waters under the same administrative body for the purpose of pollution control. In many cases this extension of jurisdiction has not been followed up by any practical and effective exercise of authority. However, as the coastal waters become more and more heavily polluted by the disposal of wastes and by oil spills, countries are becoming more aware of the problem they face.

At present, sources of pollution affecting the marine environment generally fall within the competence of functional departments. Pollution from shipping is normally handled by ministries responsible for navigation, pollution resulting from the exploration and exploitation of the continental shelf by ministries of power, or mines and pollution in harbour areas by port authorities. This division of control over the quality of water has been encouraged because of the dispersal of jurisdiction among different government agencies in respect of various aspects of the protection, development and exploitation of marine resources. Until recently little or no coordination of such management and control measures existed, and national bodies that did exist, dealt mainly with issues and problems falling within their own jurisdiction. However, it has now been recognized that there is the need for the overall coordination of marine pollution management at the national level. In many African countries little or no national legislation exist for the control of water pollution either inland or marine. Where legislation does exist, it is often scanty, and only designed to deal with specific problems as they arise. With the resurgence of scientific research on water quality criteria for fish, a better understanding of the ecological basis for fishery resources and aquatic environment management has emerged.

The problems of marine pollution, however, can not be settled by national action alone. As waters cross national frontiers so do problems of water pollution, and as many resources of the oceans lie beyond the control of any one State, they can only be effectively managed by international co-operation. Aquatic pollution is therefore a matter of international concern, both intergovernmental and non-governmental with global or regional responsibilities. Within the United Nations system various organizations are dealing with aspects of aquatic pollution. FAO, is concerned with the effects of pollution on living aquatic resources and fisheries with related environmental aspects. The United Nations itself has a special responsibility for overall political and legal aspects of the law of the sea and is also concerned with the human environment. The coordination of activities relating to the marine environment is provided, by the United Nations Advisory Committee on Coordination and its Sub-committee on Marine Science and its

Applications, and on technical matters by the Inter-Secretariat Committee on Scientific Programmes Relating to Oceanography (ICSPRO) which is constituted by the agencies giving support to the Intergovernmental Oceanographic Commission. The adoption of the United Nations Convention on the Law of the Sea, which sets out guidelines and responsibilities of the state parties has also contributed to the control and utilization of the Ocean resources. The United Nations regional economic commissions also have programmes relating to the marine environment.

The improved management of the marine environment by methods that are already well understood will undoubtedly result in the improvement of many aquatic ecosystems. However, if the demand on the marine environment is permitted to increase without control and restriction and with an eye only for profit, as they have in the past, many ecosystems will be subjected to devastating stress. Depending on political commitment and the value society attaches to the well-being of the marine environment, management priorities may result in some waters being maintained or allowed to recover to their virgin state, others partially transformed and others destroyed for temporary financial gain. What is required is permanent commitment and practical support for the conservation and preservation of the marine environment.

With the increasing human population growth and industrial development, efforts in intensive sound marine environmental management must be intensified. Increased fishing along conventional lines to cover all presently exploitable stocks can lead to the doubling of present yields. By understanding the ecology of aquatic communities and protein production, and by having adequate national and international regulatory laws which are enforced, the level of yields could gradually be increased. At present, without adequate national laws, yields are likely to lead to a condition where a very large proportion of the catches would be of small, low-valued species. FAO, together with other agencies concerned, continue to play an important role in working towards the joint goals of fisheries development and environmental health.

The immediate challenge for the coastal States is to define their long-term objectives for the marine environment and its peoples as part of a steady and balanced economic development. National governments must look critically at plans that conflict with environmental values and must strengthen existing programmes and allocate resources to maintain them.

This study of the national legislation on the resources of the sea brings out a number of important points. It can not be denied that the governments of this sub-region are fully aware of the problems of the exploration, exploitation, conservation and management of the resources of the sea. In some countries, determination to deal with the degradation of the marine environment has already led to the establishment of related administrative machinery. However, there are still numerous constraints which have yet to be overcome. Some of these coastal States still limit their operations with respect to the exploration, exploitation, conservation, managerial and protection of the environment and resources of the sea to various sectoral ministries, and have therefore, no comprehensive, integrated policy, legislation or enforcement capabilities. There are considerable gaps to be found in their national legislation as a whole which are in some cases also inconsistent with the provisions of the United Nations Convention on the Law

of the Sea. There is a need not only for the harmonization of national legislation among the coastal States but also for such legislation to be consistent with the United Nations Convention on the Law of the Sea.

The control, coordination and protection of the marine resources in the sub-region always involves a number of different ministerial departments whose activities have to be painstakingly coordinated . This creates difficult problems even in developed countries and more so in developing countries. Coordination is undoubtedly a very important and delicate issue. On the one hand, some of the countries in the sub-region have as yet not set up the necessary inter-ministerial machinery to deal with the control of and coordination of activities affecting their marine resources. On the other hand, care must be taken not to promote and propogate the creation of ambitious and complex coordination units which may prove to be a drawback by being too cumbersome and unworkable in actual practice. Whilst it is the desirable option in theory that all administrations concerned with environment and marine resources be represented in a coordinating agency, in practice this may prevent the evolvement of a consistent and effective policy. The difficulties of coordination are further exacerbated by the shortage of technical and administrative personnel specialized in environmental and marine related matters. Apart from the shortage of human resources the position is further worsened by the lack of material resources required for protection and control of the environment and marine resources. The coordinating structures that have been established, are also limited in their activities because of inadequate national legislation and the lack of ratifications of international conventions that would be of assistance.

The active participation of the coastal States within the sub-region in global and regional and sub-regional conventions related to the environment and natural resources management is still very minimal. Accession to an international convention often raises complex and important issues, affecting the ability of the State concerned to comply with the standards set out in the convention. It is therefore, imperative that before a country accedes to a convention, it must carry out a detailed assessment of the economic, technical and legal ramifications of its acceptance. In the past, such assessments have been hampered by the evident lack of technical manpower, finance and other resources at the national level. To overcome this and other constraints, the coastal States should adopt a sub-regional framework inter alia for consultation on regional and global conventions relating to the marine environment and resources for the following purposes:

- to bring the conventions to the attention of the competent national authorities and ascertain the precise local reasons for their non-ratification, identify the kind of difficulties encountered in the implementation of the conventions and propose possible ways of overcoming them, reach a common understanding of the purposes and provisions of the conventions, harmonize the stand of the coastal States to the ratification of the conventions as well as their subsequent amendments and, to assist them to understand the structure and content of their national legislation with regards to the implementation of the conventions.

Very few of the coastal States have become parties to all the existing international conventions for marine pollution control, namely, the IMO

Conventions for the Prevention of Pollution by Ships (1954-1973), the Brussels Convention on Civil Liability for 0.1 Pollution Damage (1969), the Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971), the London Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter (1972), the Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (Brussels 1969), and the Protocol Relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil (London 1973). In these days when oil tankers roam the seas more than ever before, the ratification of these conventions would be highly advisable. They offer legal safeguards and remedies against pollution caused by foreign vessels. Not only would they provide the coastal States with a measure of protection, including certain common standards and enforceable sanctions in the event of violation, they would also provide them with the basis for national regulations, support from other nations and a stronger voice in the event of amendments of the conventions.

Once again it must be stressed, that merely ratifying international conventions is not enough to bring about the efficient and effective legal protection of the marine environment. Their implementation and those of related national legislation and the taking of effective administrative measures will be required. Technical assistance to the coastal States would also enhance sub-regional harmonization of the methods and procedures of enforcement and control at the national and sub-regional levels.

The national legislation of the coastal States need to be harmonized with that of the United Nations Convention on the Law of the Sea. All the coastal States have signed the convention yet some of them still retain laws with regard to the limits of the territorial seas and EEZ that are inconsistent with its provisions. The coastal States should amend their laws and adopt new legislation in conformity with the United Nations Convention on the Law of the Sea. For instance they should adopt national legislation with regard to their territorial sea and EEZ in conformity with the Convention, prescribing national laws relating to the protection and preservation of the marine environment, the exploration and exploitation of the resources of the continental shelf or the sea-bed of the territorial seas and marine scientific research.

The Convention in Part V Article 56 defines the rights of the coastal States as having:

> 1/ "Sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and of the sea-bed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds ..... In exercising its rights and performing its duties under this Convention in the exclusive economic zone, the coastal State shall have due regard to the rights and duties of other States and shall act in a manner compatible with the provisions of this Convention....."

1/ Law of the Sea, United Nations Convention on the Law of the Sea United Nations, New York, 1983, Page 18.

In order to take advantage of these provisions and of the opportunities they offer, the coastal States must be made aware of them and they must act to ensure that the economic benefits, such as fish as a food and protein source, the exploitation of mineral resources, employment through the development of fisheries and mining industries, tourism, recreation and earned foreign exchange accrue to their peoples.

The development of the marine living resources requires large financial inputs for equipment, training, enhancement of fishing and other related industries such as processing, canning and refrigeration and for the control and management of the marine living resources.

The main tasks involved in fisheries administration is the management of fisheries resources and the development of the fisheries industry. Although development may perhaps be more important the legislation which by themselves cannot oblige the development of fishery, they can nevertheless oblige fishermen to follow certain management practices and licencing procedures that would rebound to the industry. As management depends largely and directly on legal regulations, greater emphasis should be placed on such regulations which should provide the framework for marine resources management and the authority for it. The basis for management measures and licencing decisions is a management plan. Management plans can be compared to estimated resources and estimated catches which would provide the minimum data required in order to allocate foreign and closed fishing areas. The management plan will also help indicate the critical areas where information is lacking and therefore provide valuable guidance to research and survey programmes, whose results will in turn, improve the basis for management.

Fisheries management requires basic powers as well as plans. Of great importance in the need to incorporate regulations in existing legislation to control destructive fishing methods, specifically the use of explosive fishing practices and mesh sizes, which at present has contributed to high catches of both juvenile fish and non-target species, and conservational measures such as closed seasons, minimum fish sizes and catch quotas. These regulations should be extended to include the territorial waters as well as the EEZ and may perhaps be more expeditiously promulgated and therefore more effectively administered if the power to make and supervise their operation were given to the Director of Fisheries.

Licencing is another basic management measure which can firstly be used as a measure for limiting the number of units in a fishery, as well as supplement or replace regulatory provisions controlling methods. Secondly it would be a source of useful information, on the number and type of fishing vessels and the principal, fishing methods used and facilitate the control of fishing efforts.

Licencing is not only an important means of supervising the activities of local fishing vessels but more with regard to foreign vessel. The coastal States must ensure that they have such legislation that would enable them to control and manage foreign fishing vessels in order to attain maximum benefits from their living resources. The basic principle which have in some countries, been neglected in their legislation is that no foreign vessel should be allowed to fish in waters under their jurisdiction except in accordance with a foreign fishing licence. The coastal States should also

ensure that no foreign fishing fleets are allowed within their 12 mile territorial waters, because it is within these waters that local artisanal fishermen are most active. It might also be added that the majority of the fish catch of these countries are from local artisanal fishermen. It is important therefore that the development of the living resources whether through joint ventures, foreign fleets or local efforts, do not hamper the activities of local artisanal fishermen. The licencing and regulation for foreign fishing ventures should also ensure that the mother ship is based at port and required to land their catch at the coastal State. This would facilitate the monitoring of their activities for various kinds of local taxes and fishing methods that are practiced, the gathering of statistical data and the general control of their operations. It has been estimated that African countries are losing up to 50% of their marine living resources through practices that are not controlled by legislation.

Furthermore, the requirements applicable to foreign operators should as appropriate be set out either in the licence or in relevant legislation. Specific local requirements would have to be formulated by the countries themselves, however, those such as the marking of vessels and reporting procedures should be regulated by legislation whilst those that relate to methods of fishing should be regulated by licences.

Permitted foreign fishing activities within the jurisdiction of the coastal States should be derived from developmental considerations. The most important of these are the protection of local fishing activities and the protection and conservation of the living resources, both present and potential. The coastal States should therefore make it a prerequisite to ascertain whether the existing resources can be adequately exploited by local efforts and whether foreign ventures would interfere or impede on their development, before authorization is given to such commercial fishing ventures. Aside from protecting the local fisheries, the coastal States should design development policies which defines the role of foreign fishing and promote the achievements of their objectives. The aims of these policies should be the acquisition of adequate resource data, the training of sufficient manpower, the effective transfer of technology and the obtaining of highest possible licencing fees.

The coastal States also have a range of national legislation concerned with the conservation and exploitation of living resources of the sea, however, these resources migrate freely along the coast not adhering to the limits of national jurisdiction. It is therefore most important in order to have effective and efficient national legislation and enforcement mechanisms that they be harmonized where they exist and adopted if they do not exist so that there are uniform common management standards between neighbouring countries. Efforts should also be made at the national level to adopt specific legislation for the protection of endangered species and the establishment of marine parks and reserves. More specifically legislation should deal with the classifications of species for protection, such as, completely protected, partially protected and ordinary game, licencing and the effect on the customary rights of the indigenous population as well as the control of trade on protected species including the traffic in trophies and live animals and finally, the creation, demarcation and times zoning of a range of types of protected areas as marine parks, marine reserves and multiple use zones. Furthermore the coastal States should ratify the relevant international conventions on the protection of migratory and endangered species.

Several national legislation exist dealing with the protection of the marine environment. However, once again with few exceptions, the legislation are fragmented and incomplete and do not entirely protect the marine environment or control marine pollution. More specifically there are gaps in the legislation for the protection of coastal areas in particular tidal swamps and the continental shelf from land-based industrial activities causing marine pollution. There is also a need to develop the appropriate national legislation and machineries to protect coastal areas from marine pollution in order to combat emergency oil spills and to prevent the depletion of fisheries. Furthermore legislation dealing with the exploration and exploitation of mineral resources should include protection measures to control environmental hazards in such development activities. For example in Tanzania, Part IX of the Merchant Shipping Act deals largely with deliberate discharge from merchant ships. This is, however, inadequate in that it only deals with deliberate discharges in its territorial waters, and does not extend to the EEZ. Moreover, the oceans have no physical boundaries and oil spills within the national jurisdiction of Tanzania may be carried to that of Kenya. National legislation dealing with the prevention of marine pollution from ships and merchant shipping as they relate to areas under national jurisdiction should also be harmonized. Efforts should also be made to prevent pollution from land-based sources. With the rapid increase of the coastal populations, industrial domestic and municipal waster have been on the increase. For instance, one of the immediate environmental priorities in Somalia is the pollution of its coastal waters by the discharge of raw effluents from the main Mogadishu abattoir. The effluents contain, blood, intestinal wastes and meaty solids which drain into coastal lagoons and inshore waters. This has in turn attracted many sharks, and there have been many reports of the loss of life in these shallow coastal waters due to shark attacks. Somalia is undoubtedly in need of comprehensive legislation dealing with the prevention and control of land-based sources of pollution. The existing pollution levels in the coastal States are, however, still relatively low. It is therefore not too late for the development by the coastal States of rational policies and legislation on the management of the oceans and of its resources for development purposes.

The enforcement of existing legislation still remains a major problem for the coastal States. This problem is common to developing as well as developed countries, because of the complexity and technicality of such legislation. The lack of enforcement of the existing legislation of the coastal States has been either due to the lack of financial and human resources or to the lack of political will to apply unpopular laws which were perhaps too stringent from their conception. In Tanzania, Article 40 of the Fisheries Act (19) specifically prohibits the use of explosives for fishing practices, yet the law is broken on a daily basis. It has been estimated that approximately 80% of the coral reefs which run the length of the Tanzanian coastline have been destroyed by fishermen dynamiting fish. The fisheries division alone cannot fight dynamite fishing due to the lack of finance. Few fishermen have their own boats and they keep only a fraction of their catch, the majority going to the boat owners, and as such fishing efforts remain high. The controlling of unlicenced fishing in the EEZ is even more difficult to control because of the great area involved. It can, however, be somewhat aided by requiring fishing vessels of innocent passage to stow their gear in a prescribed manner. Licenced vessels are, however, easier to control in that conditions can be imposed that facilitate control such as, clear markings on vessels to aid

visual surveillance and required fishing logs of accurate catch records that would help detect illegal transhipment and exaggerated reports of fish brought in from non-state waters. Foreign fishing vessels could also be monitored by placing observers on board.

The efficiency and effectiveness of the rules of law is based on the ability and will of the people to respect it and the ability of the government administration to enforce it. The lack of public awareness, local practices and customs and the economic livelihood of the people also play an important role in the enforcement and acceptance of law and regulations. In the latter case, without an alternative readily available source of income the hope of effective and efficient enforcement of legislation is minimal. The main requirements for effective and efficient enforcement of existing legislation are trained manpower, specialized laboratories and equipment, capabilities of policing national waters and political commitment. However, without the former, political commitment cannot be effective.

It is not, however, possible for the coastal States to undertake surveillance over their national waters. Surveillance of such a large area as that covered by both their territorial waters and EEZ would require the use of aircraft, patrol boats, specialized manpower, modern equipment and communication systems. Whilst effective surveillance may be beyond the means of an individual coastal State, it is in this area that the coastal States can successfully co-operate by pooling resources and exchanging information. In doing so the coastal States increase their capabilities in policing and monitoring the waters and activities therein in order to prevent the illegal exploitation of their marine resources. Co-operation in surveillance may also be extended to such other matters as immigration, customs and defence.

Regulatory laws require penal provisions. Although the existing regulatory laws do have penal provisions, these provisions are generally lenient and do not correspond to the offence committed. In addition to the existing penalties of fines and forfeiture of gear and catch, licence cancellation and suspension should be included as well as the forfeiture of vessels. Penal provisions in general should be strengthened in order to become more of a deterrant than they presently are.

There are already a number of technical laboratories in the coastal States, namely the Kenya Marine and Fisheries Institute, the Tanzania Fisheries Research Institute the Somali National Fisheries and Marine Institute and the Sudanese Fisheries Research Centre which could co-operate as research centres for the coastal States to enhance common standard setting. What is important is the pooling of resources for the securing of specialized equipment and scientist for baseline studies on the quality, quantity and location of marine resources and the monitoring of pollution and sources of pollution, and the exchange of information.

5.1 The Need for Co-operation

The problems and constraints that the coastal States individually face, in the development and promotion of their capabilities in marine resources development, conservation and management, and also the lack of harmonized environmental legislation and policies primarily stem from their generally under-developed economies to support the necessary investments.

If individual coastal States are left to develop and manage their marine resources on their own they risk failure in the long term. There is therefore undoubtedly a need for them to co-operate and pool their resources.

The systematic exchange of information and comparison of national legislation and administrative machinery, may lead to the gradual harmonization and adjustments of standards and practices. If the coastal States are to achieve efficient and effective control and development of their marine resources from the exploration stage to exploitation, conservation, production and marketing, then they have no alternative but to co-operate in this regard.

2/ "A sense of belonging togetherness around the common ocean, united, not separated by it, should be an ultimate goal."

2/ "UNEP: Co-operative programmes sponsored by UNEP for the protection of the marine and coastal environment in the wider Indian Ocean region. UNEP Regional Seas Reports and Studies No. 58 Pg. 58.

RECOMMENDATIONS

In making these recommendations it must be stressed that the development of marine environmental legislation for the countries of the sub-region may differ due to their legal systems, existing legislation, the socio-cultural diversity of the peoples and the policy priorities of the different governments on marine environmental matters. It is therefore necessary in the formulation of environmental legislation to firstly look at the major principles involved, namely that:

i. The development of marine environmental legislation must firstly be based on scientific principles and social and economic objectives which include:

   - objectives;
   - the identification of the problems;
   - research and data collection; followed by
   - the policy options for the decision makers to formulate the law and its method of enforcement.

ii. The efficiency of marine environmental legislation is dependent on the adequate enforcement of the law which is linked to financial resources and trained manpower.

iii. In order for marine environmental legislation to be effective, a number of supporting measures have to be developed in the country, namely:

   - environmental education and training (Scientific, technical, management, planning and environmental law);
   - national standard laboratories;
   - a national coordinating office; and
   - an organ for a multi-disciplinary approach to environmental matters where lawyers can work closely with professionals of other disciplines for the protection of the environment.

iv. Information on environmental legislation should be made available to the public in order to involve them on all aspects of policies, law enforcement feasibility and environmental impact assessment statements of development projects.

v. The public should be made aware of environmental problems and issues to gain the understanding for the need for environmental protection legislation.

vi. Marine environmental legislation should also provide for the planning of land and water use in order to maintain sustainable utilization

and protection of the living resources and their ecosystems. This will involve the evaluation of the living resources and impact assessments of exploitation practices and the effects of pollution in order to ensure the incorporation of environmental considerations into policy-making.

Nevertheless recommendations will be made irrespective of policy priorities or existing legislation of the different states taking also into consideration the principles involved in sound comprehensive marine environmental legislation.

It is therefore recommended that the selected coastal States:

1. Create a coordinating committee to coordinate marine resources related activities where responsibilities lie under different ministries;

2. Incorporate environmental provisions and policies into their development planning;

3. Formulate, plan, promote, implement, coordinate and monitor environmental policies;

4. Review and evaluate the effects of such policies;

5. Incorporate lawyers in the process of formulating and developing marine environmental policies;

6. Base the process of developing marine environmental legislation on scientific technology and data;

7. Establish procedures to carry out environmental impact assessments for proposed development activities;

8. Harmonize their existing legislation and adopt legislation in conformity to the provisions of the United Nation Law Convention on the Sea;

9. Promote marine environmental awareness;

10. Disseminate information on marine environmental matters;

11. Establish legislation for the protection and management of the marine and coastal areas from pollution during the exploration and exploitation of natural resources and development;

12. Establish and/or strengthen legislation on the development of marine parks, protected areas and multiple use zones;

13. Establish legislation on the protection of marine and coastal areas and endangered species;

14. Establish legislation on the protection of the marine and coastal environment from land-based sources of pollution;

15. Establish legislation on the protection of the marine and coastal environment to include internal waters, ports, territorial seas and the EEZ from oil pollution and other hazardous substances whether due to deliberate or accidental discharge;

16. Establish a national contingency plan to combat oil pollution or other hazardous waste;

17. Strengthen and/or establish safety regulations for marine transportation in respect to marine accidents, prevention and control of marine pollution, liability and compensation;

18. Strengthen existing fisheries legislation to include, over exploitation, prohibited exploitation methods, joint venture agreements and management, licencing, permits, closed seasons, financial loans to artisanal fishermen and subsidized fishing equipment;

19. Establish legislation in regards to tourism on the protection, conservation, management and control of the marine and coastal environment;

20. Adopt and ratify the relevant international conventions related to oil pollution and other hazardous waste, compensation and liability, conservation and protection of the natural resources, endangered species and migratory species;

21. Make a quantitative survey of the marine resources in the exclusive economic zone and territorial waters;

22. Provide the necessary infrastructure for technology and research in marine science (Institutions, training, programmes, laboratories, equipment and vessels);

23. Establish training programmes in marine science (Fisheries, oceanography, ocean technology, seamanship, port management, maritime economics, and the application of remote sensing to the marine environment);

24. Increase national participation in marine resources development projects and fisheries through incentives of financial assistance and subsides equipment;

25. Provide artisanal fishermen with financial assistance in the form of soft-term loans to enable them to strengthen and develop their fishing activities;

26. Develop the necessary infrastructure for the fishery industry, i.e. storage, processing, marketing and distribution systems;

27. Reduce spoilage and enhance the quality of fish products by providing advisory services on fish quality control;

28. Establish and up-grade statistical data on the exploited marine resources;

29. Establish a national centralized data bank on information and statistical data on the marine resource and activities;

30. Establish joint ventures, fishing agreements and the licencing of foreign fishing vessels as a short-term solution, for the coastal countries who lack the capabilities to exploit their marine resources, keeping in mind the transfer of technology for the development of their own capabilities;

31. Develop the harbour facilities for the shipping and fisheries industries;

32. Establish at the sub-regional level a Marine Resources Development Committee which would enhance the implementation of the latter recommendations.

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KENYA

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ANNEX

Proposal for Multinational Co-operation in Marine Resources Development among Ethiopia, Kenya, Somalia, Sudan and the United Republic of Tanzania

To achieve the optimum utilization of the marine resources of the five coastal States it is recommended that a common multinational institution to be known as the Marine Resources Development Committee (MARDEC), be established. The objectives of MARDEC would be to:

Co-operation:

i. Promote co-operation among the member States in the development, management and exploitation of their marine resources;

ii. Promote joint ventures among the member States for the exploration and exploitation of their marine resources;

iii. Mobilize funds for common or joint activities;

iv. Hold regular expert level meetings to review and update knowledge on matters affecting marine resources.

Legislation:

i. Bring International conventions to the attention of national authorities and ascertain the local reasons for the lack of ratification, the kind of difficulties encountered and possible ways of overcoming them;

ii. Reach common understanding of the purpose and provisions of international conventions;

iii. Harmonize the ratification of the agreements as well as subsequent amendments;

iv. Promote the understanding and structure and content of their national legislation with regards to the implementation of international conventions;

v. Promote the adoption and harmonization of national legislation to achieve a common standard and establish machineries for the management, development and control of their marine resources.

Marine Science and Technology:

i Promote co-operation in the development of marine science and surveying and in the exploitation of new technologies;

ii. Promote co-operation among the Marine Science Institutions of the member States through the exchange of information and technical data and the pooling of both material and human resources;

iii. Harmonize marine resources data collection methods;

iv. Strengthen co-operation in the development of manpower training facilities and increase in the number of trained personnel in the various field of the development of marine resources and marine science;

v. Establish common mechanisms and procedures for controlling marine pollution;

vi. Promote co-operation in the protection and conservation of endangered marine species; and

vii. Co-operate in carrying out surveys of the marine environment.

Foreign Intervention:

i. Coordinate their policies and other activities in connection with negotiations and agreements with foreign companies and fishing vessels with respect to the exploitation of their resources of the sea;

ii. Harmonize control procedures for foreign mining companies and fishing vessels.

Co-operation with International Organizations:

i. Establish working relationships with specialized agencies and organizations in the field of resources of the sea and marine science; and

ii. Seek necessary technical assistance, when required, from specialized agencies or organizations concerned with the objectives of MARDEC.

Composition:

Membership of MARDEC shall be composed of expert designated by the member States. Members may be accompanied to meetings by advisers.

The long term aim would be to ensure that the member States are all equipped with common international conventions, national laws, technically trained manpower, scientific knowhow and common standard-setting machinery for the exploration, exploitation and management of their marine resources.

Secretariat:

Until otherwise determined by MARDEC its secretariat services shall be provided by ECA.